

Appendix A

Drawn Sample queries of Class (G₁₁)

- 1- *SELECT* address_id, line1_number_building, line2_number_street, line3_area_locating *FROM* address *WHERE* zip_postcode=5 and city=2;
- 2- *SELECT* address_id, line1_number_building, line2_number_street, line3_area_locating, city1 *FROM* address *WHERE* zip_postcode >5 and city=12;
- 3- *SELECT* city1, country, address_id *FROM* address *WHERE* city1 >1 and city=2;
- 4- *SELECT* city1, country, address_id *FROM* address *WHERE* city1 <>2 and city=2;
- 5- *SELECT* state_province, country, address_id *FROM* address *WHERE* line2_number_street <> 22 and city=15;
- 6- *SELECT* other_address_details, address_id *FROM* address *WHERE* line2_number_street <18 and city=17;
- 7- *SELECT* city1, country, state_province, line1_number_building, line2_number_street, line3_area_locating *FROM* address *WHERE* city=25 city<49;
- 8- *SELECT* country *FROM* address *WHERE* city=19 and address_id=19;
- 9- *SELECT* country, city1, state_province *FROM* address *WHERE* city=17 and country=22;
- 10- *SELECT* address_id, line1_number_building *FROM* address *WHERE* city=23 and line2_number_street=19;
- 11- *SELECT* author_id *FROM* author *WHERE* author_id_cls=1 and author_first_name=1;
- 12- *SELECT* author_id *FROM* author *WHERE* author_id_cls=1 and author_first_name=2;
- 13- *SELECT* author_id, author_first_name *FROM* author *WHERE* author_id_cls=15 and author_last_name <21;
- 14- *SELECT* author_last_name, author_first_name *FROM* author *WHERE* author_id_cls=19 and author_id <21;
- 15- *SELECT* author_last_name, author_first_name *FROM* author *WHERE* author_id_cls=7 and author_id <>13;
- 16- *SELECT* author_id_cls, author_last_name, author_first_name *FROM* author *WHERE* author_id_cls=11 and author_id <32;

- 17- *SELECT* author_id_cls, author_first_name *FROM* author *WHERE* author_id_cls=4 and author_id >33;
- 18- *SELECT* author_id_cls ,author_id *FROM* author *WHERE* author_id_cls=5 and author_first_name<>17;
- 19- *SELECT* author_first_name *FROM* author *WHERE* author_id_cls=14 and author_last_name=14;
- 20- *SELECT* * *FROM* author *WHERE* author_id_cls=16 and author_id <>18;
- 21- *SELECT* library_id, isbn *FROM* book_at_library *WHERE* lib_cls=19 and isbn <50;
- 22- *SELECT* library_id, isbn *FROM* book_at_library *WHERE* lib_cls=2 and isbn =9;
- 23- *SELECT* library_id, isbn, lib_cls *FROM* book_at_library *WHERE* lib_cls=27 and quantity_on_stock>3;
- 24- *SELECT* quantity_on_stock *FROM* book_at_library *WHERE* lib_cls=15 and isbn <>22;
- 25- *SELECT* quantity_on_stock *FROM* book_at_library *WHERE* lib_cls=9 and isbn >1;
- 26- *SELECT* quantity_on_stock,isbn, lib_id *FROM* book_at_library *WHERE* lib_cls=24 and library_id=24;
- 27- *SELECT* isbn *FROM* book_at_library *WHERE* lib_cls=11 and isbn <118;
- 28- *SELECT* * *FROM* book_at_library *WHERE* lib_cls=21 and quantity_on_stock<> 27;
- 29- *SELECT* quantity_on_stock, isbn *FROM* book_at_library *WHERE* lib_cls=16 and library_id>32;
- 30- *SELECT* quantity_on_stock, library_id *FROM* book_at_library *WHERE* lib_cls=13 and library_id>32;
- 31- *SELECT* author_id,isbn *FROM* book_by_author *WHERE* author_id_cls=7 and isbn=7;
- 32- *SELECT* author_id,isbn *FROM* book_by_author *WHERE* author_id_cls=1 and isbn<3;
- 33- *SELECT* author_id_cls,isbn *FROM* book_by_author *WHERE* author_id_cls=1 and isbn>18;
- 34- *SELECT* author_id,isbn, author_id_cls *FROM* book_by_author *WHERE* author_id_cls=12 and isbn<> 33;
- 35- *SELECT* isbn *FROM* book_by_author *WHERE* author_id_cls=1 and ather_id<9;

36- *SELECT* author_id,author_id_cls *FROM* book_by_author *WHERE* author_id_cls=12 and author_id>8;

37- *SELECT* * *FROM* book_by_author *WHERE* author_id_cls=5 and isbn<12;

38- *SELECT* * *FROM* book_by_author *WHERE* author_id_cls=7 and isbn>12;

39- *SELECT* author_id_cls *FROM* book_by_author *WHERE* author_id_cls=3 and author_id<>2;

40- *SELECT* author_id *FROM* book_by_author *WHERE* author_id_cls=6 and isbn<>3;

Appendix B

Drawn Sample queries of Class (G_{1,2})

- 1- *SELECT* member_id , member_first_name , member_last_name, gender *FROM* Member *WHERE* member_id = 1 and email_add = 1;
- 2- *SELECT* member_first_name , member_last_name, phone_number, email_add ,gender *FROM* Member *WHERE* member_last_name = 1 and member_id>15;
- 3- *SELECT* * *FROM* Member *WHERE* member_first_name =7 and gender =7;
- 4- *SELECT* member_id , member_first_name, gender *FROM* Member *WHERE* member_id = 10 and mem_id>5;
- 5- *SELECT* member_first_name , member_last_name, gender *FROM* Member *WHERE* member_first_name = 5 and phone_number = 5;

- 6- *SELECT* member_id, member_first_name, member_last_name, phone_number, other_member_details *FROM* Member *WHERE* member_id =8 and email_address =8 ;
- 7- *SELECT* member_id, gender *FROM* Member *WHERE* member_first_name=13 and member_last_name=131 ;
- 8- *SELECT* **FROM* Member *WHERE* member_id =2 and gender =2;
- 9- *SELECT* member_address_id, member_id, member_last_name, member_first_name, phone_number, email_add *FROM* Member *WHERE* member_id =6 and mem_id > 1;
- 10- *SELECT* member_id, member_address_id *FROM* address *WHERE* member_first_name=7 and gender=7;
- 11- *SELECT* address_id, line1_number_building, line2_number_street, line3_area_locating, city1 *FROM* address *WHERE* address_id=1 and city1=1;
- 12- *SELECT* address_id, country, city1 *FROM* address *WHERE* address_id=5 and zip_postcode =5;
- 13- *SELECT* city, city1, country, state_province, zip_postcode *FROM* address *WHERE* country=7 and city<8;
- 14- *SELECT* address_id, line1_number_building, line2_number_street, line3_area_locating, country *FROM* address *WHERE* address_id=7 and state_province <6;
- 15- *SELECT* country, zip_postcode, city1, state_province *FROM* address *WHERE* address_id=13 and line1_number_building <>75;
- 16- *SELECT* address_id, city1, other_address_details *FROM* address *WHERE* country=10 and address_id <31;
- 17- *SELECT* country *FROM* address *WHERE* address_id=6 city <>70;
- 18- *SELECT* country, city, city1, state_province *FROM* address *WHERE* country=4 and zip_poscode < 13;
- 19- *SELECT* country, zip_postcode, city1, country, city *FROM* address *WHERE* address_id=16 and line3_area_locating <>25;
- 20- *SELECT* country, other_address_details, address_id city, country, zip_postcode *FROM* address *WHERE* address_id=8 and state_province <9;
- 21- *SELECT* * *FROM* author *WHERE* author_id =1 and author_first_name =1;
- 22- *SELECT* author_id_cls, author_id *FROM* author *WHERE* author_id =5 and author_id_cls > 1;

- 23- *SELECT * FROM author WHERE author_id =4 and author_id_cls < 5;*
- 24- *SELECT author_first_name, author_last_name FROM author WHERE author_id =8 and author_last_name =8;*
- 25- *SELECT author_first_name, author_id_cls, author_id FROM author WHERE author_id =6 and author_last_name <> 7;*
- 26- *SELECT author_last_name, author_id FROM author WHERE author_id =7 and author_last_name = 7;*
- 27- *SELECT author_first_name, FROM author WHERE author_id =12 and author_id_cls > 5;*
- 28- *SELECT author_last_name, FROM author WHERE author_id =10 and author_first_name =10;*
- 29- *SELECT * FROM author WHERE author_id =11 and author_first_name <> 22;*
- 30- *SELECT author_id_cls FROM author WHERE author_id =4 and author_first_name = 4;*
- 31- *SELECT emp_id, emp_first_name, emp_last_name FROM employee WHERE emp_id =2 and gender =2;*
- 32- *SELECT emp_id, gender, address FROM employee WHERE emp_id =3 and phone > 3;*
- 33- *SELECT emp_id, emp_first_name, emp_last_name, email_address FROM employee WHERE emp_id =5 and request-id <> 55;*
- 34- *SELECT emp_id, emp_first_name, emp_last_name, date_of_birth, email_address , gender FROM employee WHERE emp_id =30 and phone <31;*
- 35- *SELECT * FROM employee WHERE emp_id =8 and gender = 8;*
- 36- *SELECT email_address ,phone, request_id, gender FROM employee WHERE emp_id =10 and address =8;*
- 37- *SELECT emp_id, request_id FROM employee WHERE emp_id =15 and email_address=1;*
- 38- *SELECT emp_first_name, address , gender,phone, email_address, request_id FROM employee WHERE emp_id =6 and gender=6;*
- 39- *SELECT emp_id FROM employee WHERE emp_id =9 and emp_first_name <>12;*
- 40- *SELECT email_address , address, phone, request_id, phone FROM employee WHERE emp_id =15 and emp_first_name=15;*

Appendix C

Drawn Sample queries of Class (G₁₃)

- 1- *SELECT* address_id, line1_number_building, line2_number_street, line3_area_locating *FROM* address *WHERE* country<>3 and city<155;
- 2- *SELECT* city, country,zip_postcode, city1, state_province, country *FROM* address *WHERE* address_i>17 and city<123;
- 3- *SELECT* other_address_detials, address_id *FROM* address *WHERE* city <5 and state_province=1;
- 4- *SELECT* city1, country, address_id *FROM* address *WHERE* city<5 and line1_number_building=1;
- 5- *SELECT* state_province, zip_postcode *FROM* address *WHERE* address_id<19 and city<90;
- 6- *SELECT* address_id, line1_number_building, line2_number_street, line3_area_locating *FROM* address *WHERE* zip_postcode= and city>19;
- 7- *SELECT* city1, country, address_id, state_province, zip_postcode, *FROM* address *WHERE* address_id <118 city>3;
- 8- *SELECT* city,city1,country, state_province, line1_number_building, line2_number_street, line3_area_locating *FROM* address *WHERE* city>3 and address_id>1;
- 9- *SELECT* * *FROM* address *WHERE* city>1 and line2_number_street>5;

- 10- *SELECT* address_id, other_address_details *FROM* address *WHERE* city>7 and country<>6;
- 11- *SELECT* author_id , author_first_name, author_last_name *FROM* author *WHERE* author_id_cls < 10 and author_id>1;
- 12- *SELECT* author_first_name, author_last_name *FROM* author *WHERE* author_id_cls<12 and author_first_name=1;
- 13- *SELECT* author_id , author_id_cls *FROM* author *WHERE* author_id_cls < 6 and author_last_name =2;
- 14- *SELECT* * *FROM* author *WHERE* author_id_cls >3 and author_id > 2;
- 15- *SELECT* author_first_name *FROM* author *WHERE* author_id_cls <4 and author_id > 4;
- 16- *SELECT* author_id_cls ,author_last_name , author_first_name *FROM* author *WHERE* author_id_cls >1 and author_id >1;
- 17- *SELECT* author_last_name, author_first_name *FROM* author *WHERE* author_id_cls >2 and author_first_name =1;
- 18- *SELECT* author_first_name *FROM* author *WHERE* author_id_cls> 33 and author_id >44;
- 19- *SELECT* author_last_name *FROM* author *WHERE* author_id_cls > 6 and author_first_name=2;
- 20- *SELECT* * *FROM* book_by_category *WHERE* car_id_cls> 1 and category_id>1;
- 21- *SELECT* category_id , isbn *FROM* book_by_category *WHERE* car_id_cls>2 and isbn>2;
- 22- *SELECT* category_id , isbn *FROM* book_by_category *WHERE* car_id_cls>2 and isbn>2;
- 23- *SELECT* isbn *FROM* book_by_category *WHERE* car_id_cls>3 and isbn > 2;
- 24- *SELECT* category_id , car_id_cls *FROM* book_by_category *WHERE* car_id_cls>4 and isbn<12;
- 25- *SELECT* * *FROM* book_by_category *WHERE* car_id_cls> 6 and isbn >2.
- 26- *SELECT* * *FROM* library *WHERE* lib_cls <10 and lib_id <15;

- 27- *SELECT* library_id,library_name *FROM* library *WHERE* lib_cls <12 and library_details =1;
- 28- *SELECT* library_id,library_name, address_id *FROM* library *WHERE* lib_cls <20 and library_id <18;
- 29- *SELECT* library_details ,library_name *FROM* library *WHERE* lib_cls <17 and library_id >3;
- 30- *SELECT* library_id, library_name , library_details *FROM* library *WHERE* lib_cls <13 and address_id >2;
- 31- *SELECT* member_id,member_first_name,member_last_name, gender *FROM* member *WHERE* mem_id> 1and gender=1;
- 32- *SELECT* phone_number, email_address , member_first_name, member_last_name, gender *FROM* member *WHERE* mem_id> 2 and member_first_name <> 12;
- 33- *SELECT*member_id,member_address_id, mem_id , email_address *FROM* member *WHERE* mem_id> 5 and email_address=3;
- 34- *SELECT* email_address ,member_first_name,member_last_name, gender *FROM* member *WHERE* mem_id> 4 and member_id >6;
- 35- *SELECT* * *FROM* member *WHERE* mem_id> 1 and phone_number=8;
- 36- *SELECT* email_address ,phone_number, other_member_details *FROM* member *WHERE* mem_id<11 and member_id <>15;
- 37- *SELECT* member_first_name,member_last_name *FROM* member *WHERE* mem_id <14 and phone_number > 2;
- 38- *SELECT* email_address ,phone_number *FROM* member *WHERE* mem_id < 18 and member_id >3;
- 39- *SELECT* * *FROM* member *WHERE* mem_id < 50 and gender < 50;
- 40- *SELECT* member_first_name, member_last_name, gender, phone_number *FROM* member *WHERE* mem_id<22and member_address_id <30;

Appendix D

Drawn Sample queries of Class (G₁₄)

- 1- *SELECT* address_ id, city1, city, country *FROM* address *WHERE* address_id> 17 and line1_ number_ building>17;
- 2- *SELECT* line1_ number_ building, line2_ number_ street, line3_ area_ locating, address_id, country,zip_postcode, city1, country *FROM* address *WHERE* address_i>23 and zip_postcode >23;
- 3- *SELECT* city,country, zip_postcode *FROM* address *WHERE* city <5 and line2_ number_ street<18;
- 4- *SELECT* * *FROM* address *WHERE* country>5 and city <>120;
- 5- *SELECT* country ,state_province, zip_postcode , city1 *FROM* address *WHERE* address_id > 35 and line3_ area_ locating <12;
- 6- *SELECT* address_id, city, city1, country *FROM* address *WHERE* address_id < 8 and line1_ number_ building>1;
- 7- *SELECT* address_id, country, city1, state_province, zip_postcode, *FROM* address *WHERE* address_id <17 zip_postcode <17;
- 8- *SELECT* country, city1, state_province, zip_postcode *FROM* address *WHERE* country<8 and line2_ number_ street<18;
- 9- *SELECT* * *FROM* address *WHERE* country <20 and city<>20;
- 10- *SELECT* country, city1, state_province, zip_postcode *FROM* address *WHERE* address_id<23 and line3_ area_ locating<25;
- 11- *SELECT* * *FROM* author *WHERE* author_id>43 and author_last_name=5;
- 12- *SELECT* author_id, author_last_name *FROM* author *WHERE* author_id>105 and author_id_cls<> 16;

- 13- *SELECT* author_id, author_id_cls *FROM* author *WHERE* author_id>56 and author_first_name=1;
- 14- *SELECT* author_id, author_last_name *FROM* author *WHERE* author_id>105 and author_id_cls<>16;
- 15- *SELECT* author_last_name *FROM* author *WHERE* author_id> 4 and author_first_name>4;
- 16- *SELECT* * *FROM* book_at_library *WHERE* isbn <22 and quantity_on_stock >1;
- 17- *SELECT* isbn,library_id *FROM* book_at_library *WHERE* library_id<19 <22 and quantity_on_stock <15;
- 18- *SELECT* isbn,library_id ,lib_cls *FROM* book_at_library *WHERE* library_id<13 <22 and quantity_on_stock <20;
- 19- *SELECT* isbn *FROM* book_at_library *WHERE* isbn< 30 and lib_cls<. 35;
- 20- *SELECT* * *FROM* book_at_library *WHERE* isbn <10 and quantity_on_stock <15;
- 21- *SELECT* emp_id, emp_first_name, emp_last_name *FROM* employee *WHERE* emp_id >18 and gender =3;
- 22- *SELECT* emp_first_name, emp_last_name ,date_of_birth *FROM* employee *WHERE* emp_id > 5 and gender=15;
- 23- *SELECT* emp_id, address, phone, email_address *FROM* employee *WHERE* emp_id >4 and emp_first_name>5;
- 24- *SELECT* emp_id, request_id *FROM* employee *WHERE* emp_id >77 and email_address>41;
- 25- *SELECT* emp_first_name, emp_last_name,phone,email_address *FROM* employee *WHERE* emp_id >21 and emp_id>21;
- 26- *SELECT* emp_first_name, emp_last_name , emp_id *FROM* employee *WHERE* emp_id < 66 and gender>5;
- 27- *SELECT* * *WHERE* emp_id <66 and request_id>28;
- 28- *SELECT* address ,phone, email_address *FROM* employee *WHERE* emp_id <80 and emp_first_name>3;
- 29- *SELECT* emp_id, request_id *FROM* employee *WHERE* emp_id <60 and emp_first_name request_id>5;

- 30- *SELECT* emp_first_name, emp_last_name ,email_ address , phone *FROM* employee *WHERE* emp_id < 50 and request_id<>25;
- 31- *SELECT* * request_id, member_id, isbn *FROM* member_request *WHERE* request_id >20 and isbn>5;
- 32- *SELECT* request_id, member_id, isbn *FROM* member_request *WHERE* request_id >2 and isbn>43;
- 33- *SELECT* date_request, date_located *FROM* member_request *WHERE* request_id >115 and members_id > 80;
- 34- *SELECT* isbn *FROM* member_request *WHERE* request_id >66 and other_request_details > 35;
- 35- *SELECT* isbn, member_id, date_request, date_located *FROM* member_request *WHERE* request_id >77 and members_id <120;
- 36- *SELECT* * *FROM* member_request *WHERE* request_id <20 and isbn>17;
- 37- *SELECT* date_request, date_located *FROM* member_request *WHERE* request_id< 45 and isbn >1;
- 38- *SELECT* request_id, member_id, isbn *FROM* member_request *WHERE* request_id< 14 and members_id <>25;
- 39- *SELECT* isbn, member_id, date_request, date_located *FROM* member_request *WHERE* request_id< 8 and members_id >1;
- 40- *SELECT* isbn *FROM* member_request *WHERE* request_id< 80 and other_request_details<22;

Appendix E

Drawn Sample queries of Class (G₁₅)

- 1- *SELECT * FROM address WHERE address_id =1 and city1<2;*
- 2- *SELECT line1_ number_ building, line2_ number_ street, line3_ area_ locating, country FROM address WHERE address_id = 5 and city1<6;*
- 3- *SELECT city1,country, zip_postcode, state_province, address_id FROM address WHERE address_id=7 and zip_postcode<10;*
- 4- *SELECT address_id, other_address_details FROM address WHERE country= 8 and city1>1;*
- 5- *SELECT country ,state_province, zip_postcode , city1, other_address_details FROM address WHERE country=16 and zip_postcode>1;*
- 6- *SELECT library_id, library_name FROM library WHERE library_id =1and lib_cls<>3;*
- 7- *SELECT library_detials, library_name FROM library WHERE library_id =3 and address_id=3;*
- 8- *SELECT library_detials, library_id FROM library WHERE library_id =12 and address_id<20;*
- 9- *SELECT * FROM library WHERE library_id =2 and libray_name>1;*
- 10- *SELECT library_name FROM library WHERE library_id =15 and library_detials=15;*
- 11- *SELECT * FROM address WHERE address_id >15 and city1<2;*
- 12- *SELECT line1_ number_ building, line2_ number_ street, line3_ area_ locating, country FROM address WHERE address_id >25 and city1<10;*
- 13- *SELECT city1,country, zip_postcode, state_province, address_id FROM address WHERE address_id>71 and zip_postcode < 20;*
- 14- *SELECT address_id, other_address_details FROM address WHERE country>13 and city1>121;*

15- *SELECT* country ,state_province, zip_postcode , city1, other_address_details *FROM* address *WHERE* country >33 and zip_postcode>59;

16- *SELECT* library_id, library_name *FROM* library *WHERE* library_id >87and lib_cls<>13;

17- *SELECT* library_detials, library_name *FROM* library *WHERE* library_id >19 and address_id=10;

18- *SELECT* library_detials, library_id *FROM* library *WHERE* library_id >311and address_id>315;

19- *SELECT* * *FROM* library *WHERE* library_id >22 and libray_name>257;

20- *SELECT* library_name *FROM* library *WHERE* library_id >620 and library_details >500;

21- *SELECT* * *FROM* address *WHERE* address_id <>5 and city1<44;

22- *SELECT* line1_ number_ building, line2_ number_ street, line3_ area_ locating, country *FROM* address *WHERE* address_id <>7 and city1<10;

23- *SELECT* city1,country, zip_postcode, state_province, address_id *FROM* address *WHERE* address_id <>12 and zip_postcode<18;

24- *SELECT* address_id, other_address_details *FROM* address *WHERE* country<>8 and city1>100;

25- *SELECT* country ,state_province, zip_postcode , city1, other_address_details *FROM* address *WHERE* country<>16 and zip_postcode>45;

26- *SELECT* library_id, library_name *FROM* library *WHERE* library_id <>1and lib_cls<>3;

27- *SELECT* library_detials, library_name *FROM* library *WHERE* library_id <>3 and address_id=3;

28- *SELECT* library_detials, library_id *FROM* library *WHERE* library_id =<> 130 and address_id<18;

29- *SELECT* * *FROM* library *WHERE* library_id <>2 and libray_name>73;

30- *SELECT* library_name *FROM* library *WHERE* library_id <>23 and library_detials=15;

31- *SELECT* * *FROM* address *WHERE* address_id <8 and city1<15;

32- *SELECT* line1_ number_ building, line2_ number_ street, line3_ area_ locating, country *FROM* address *WHERE* address_id <20 and city1<16;

- 33- *SELECT* city1,country, zip_postcode, state_province, address_id *FROM* address *WHERE* address_id <12 and zip_postcode < 20;
- 34- *SELECT* address_id, other_address_details *FROM* address *WHERE* country<3 and city1>19;
- 35- *SELECT* country ,state_province, zip_postcode , city1, other_address_details *FROM* address *WHERE* country <46 and zip_postcode>17;
- 36- *SELECT* library_id, library_name *FROM* library *WHERE* library_id <31and lib_cls<>3;
- 37- *SELECT* library_detials, library_name *FROM* library *WHERE* library_id <29 and address_id>5;
- 38- *SELECT* library_detials, library_id *FROM* library *WHERE* library_id <18 and address_id<50;
- 39- *SELECT* * *FROM* library *WHERE* library_id <27 and libray_name>4;
- 40- *SELECT* library_name *FROM* library *WHERE* library_id <6 and library_detials >4;

Appendix F

Drawn Sample queries of Class (G 21)

- 1-*SELECT*member_first_name,member_last_name,gender,date_request,date_located,request_id *FROM* member, member_request *WHERE* members_id=mem_id and isbn>19 and gender=3;

- 2- *SELECT*member_first_name,member_last_name,phone,date_request,request_id,email_address, isbn *FROM* member, member_request *WHERE* members_id=mem_id and request_id>62 and member_last_name=3;
- 3- *SELECT* phone, gender ,email_address, isbn,member_id *FROM* member, member_request *WHERE* members_id=mem_id and member_id>5 and gender<20;
- 4- *SELECT* member_first_name, isbn, member_id *FROM* member, member_request *WHERE* members_id=mem_id and request_id>0 and phone>23;
- 5- *SELECT*member_id,request_id,isbn,other_member_details,other_request_details *FROM* member, member_request *WHERE* members_id=mem_id and isbn<50>5 and member_add_id<50;
- 6- *SELECT* member_id,member_first_name,phone *FROM* member, member_request *WHERE* members_id=mem_id and member_id>3 and request_id<>93;
- 7- *SELECT* date_request,date_located,mem_id, isbn *FROM* member, member_request *WHERE* members_id=mem_id and member_ddress_id>33 and isbn<100;
- 8- *SELECT* phone ,email_address ,member_address_id *FROM* member, member_request *WHERE* members_id=mem_id and member_address_id>27 and request_id >10;
- 9- *SELECT* phone, member_first_name ,email_address, *FROM* member, member_request *WHERE* members_id=mem_id and email_address<>1 and isbn<75;
- 10- *SELECT* isbn,mem_id, ,member_id *FROM* member, member_request *WHERE* members_id=mem_id and mem_id>77 and isbn>77;
- 11- *SELECT*member_first_name,member_last_name,gender,date_request,date_located,request_id *FROM* member, member_request *WHERE* members_id=mem_id and isbn>32 and gender<>5;
- 12- *SELEC*member_first_name,member_last_name,phone,date_request,request_id,email_address, isbn *FROM* member, member_request *WHERE* members_id=mem_id and request_id <>55 and member_last_name=1;
- 13- *SELECT* phone, gender ,email_address, isbn, request_id *FROM* member, member_request *WHERE* members_id=mem_id and request_id>27 and gender<>88;
- 14- *SELECT* member_first_name, isbn, member_id *FROM* member, member_request *WHERE* members_id=mem_id and request_id>56 and phone<>11;
- 15- *SELECT*member_id,request_id,isbn,other_member_details,other_request_details *FROM* member, member_request *WHERE* members_id=mem_id and isbn<60 and gender<60;

- 16- *SELECT members_id,member_first_name,phone FROM member, member_request WHERE members_id=mem_id and members_id>54 and request_id<>88;*
- 17- *SELECT date_request,date_located,members_id, isbn FROM member, member_request WHERE members_id=mem_id and member_ddress_id>42 and request_id<97;*
- 18- *SELECT phone ,email_address ,member_address_id FROM member, member_request WHERE members_id=mem_id and member_address_id>39 and request_id >21;*
- 19- *SELECT phone, member_first_name ,email_address, FROM member, member_request WHERE members_id=mem_id and email_address<>1 and request_id>5;*
- 20- *SELECT isbn,mem_id ,members_id FROM member, member_request WHERE members_id=mem_id and mem_id>90 and isbn>44;*
- 21- *SELECT library_id, library_name,isbn FROM library, book_at_library WHERE lib_cls=lib_cls and isbn >35 and library_id <>90;*
- 22- *SELECT library_id, library_name, quantity FROM library, book_at_library WHERE lib_cls=lib_cls and quantity<26 and address_id >11;*
- 23- *SELECT library_id, library_name, isbn FROM library, book_at_library WHERE lib_cls=lib_cls and quantity >32 and address_id <> 18;*
- 24- *SELECT library_details , library_name, quantity FROM library, book_at_library WHERE lib_cls=lib_cls and library_name>2 and isbn>2;*
- 25- *SELECT library_id, address_id, quantity FROM library, book_at_library WHERE lib_cls=lib_cls and isbn <>37 and library_details>42;*
- 26- *SELECT library_details , library_name, isnb FROM library, book_at_library WHERE lib_cls=lib_cls and library_details>5 and isbn>44;*
- 27- *SELECT isbn, quantity FROM library, book_at_library WHERE lib_cls=lib_cls and address_id>75 and isbn <> 50;*
- 28- *SELECT library_details , isbn FROM library, book_at_library WHERE lib_cls=lib_cls and address_id > 75 and isbn<> 17;*
- 29- *SELECT isbn, quantity, lib_cls FROM library, book_at_library WHERE lib_cls=lib_cls and address_id>15 and quantity>15;*
- 30- *SELECT isbn, address_id, library_name FROM library, book_at_library WHERE lib_cls=lib_cls and library_name <>20 and isbn <> 20;*

- 31- *SELECT library_id, library_name, isbn FROM library, book_at_library WHERE library_id = library_id and library_id >1 and isbn>1;*
- 32- *SELECT library_id, library_name, quantity FROM library, book_at_library WHERE lib_cls=lib_cls and quantity >1 and librar_id > 1;*
- 33- *SELECT library_id , library_name, isbn FROM library, book_at_library WHERE lib_cls=lib_cls and address_id<3 and isbn>3;*
- 34- *SELECT library_name, library_details FROM library, book_at_library WHERE lib_cls=lib_cls and lib_cls>25 and library_id>75;*
- 35- *SELECT address_id , library_id FROM library, book_at_library WHERE lib_cls=lib_cls and library_details>15 and isbn>15;*
- 36- *SELECT isbn, library_id, library_details FROM library, book_at_library WHERE lib_cls=lib_cls and address_id>13 and isbn >13;*
- 37- *SELECT library_details , isbn FROM library, book_at_library WHERE lib_cls=lib_cls and address_id quantity <>1 and library_name<>1;*
- 38- *SELECT isbn, library_details FROM library, book_at_library WHERE lib_cls=lib_cls and address_id>11 and isbn>88;*
- 39- *SELECT isbn, quantity, lib_cls FROM library, book_at_library WHERE lib_cls=lib_cls and quantity>14 and lib_cls>13;*
- 40- *SELECT address_id, library_name, isbn FROM library, book_at_library WHERE library_id = library_id and library_id <>120 and isbn <> 120;*

Appendix G

Drawn Sample queries of Class (G 22)

- 1- *SELECT emp_id, emp_first_name, address, isbn FROM employee, member_request WHERE request_id=request_id and phone>1 and isbn>1;*
- 2- *SELECT phone, emp_first_name, email_address, isbn, gender, address FROM employee, member_request WHERE request_id=request_id and phone >53 and isbn <>119 ;*
- 3- *SELECT member_id, request_id, date_located, date_requested, isbn FROM employee, member_request WHERE request_id=request_id and emp_id >16 and isbn <33 ;*
- 4- *SELECT member_id, date_located, date_requested, isbn FROM employee, member_request WHERE request_id=request_id and emp_id >27 and isbn >55 ;*
- 5- *SELECT emp_id, date_of_birth, address, phone email_address, request_id FROM employee, member_request WHERE request_id=request_id and gender >1 and other_request_details >1;*
- 6- *SELECT emp_id ,emp_first_name, request_id FROM employee, member_request WHERE request_id=request_id and gender <15 and isbn > 3 ;*

- 7- *SELECT request_id, isbn FROM employee, member_request WHERE request_id=request_id and emp_id >8 and isbn >1 ;*
- 8- *SELECT emp_id, emp_first_name, requested FROM employee, member_request WHERE request_id=request_id and gender <15 and isbn >3 ;*
- 9- *SELECT emp_id, date_of_birth, request_id FROM employee, member_request WHERE request_id=request_id and address >90 and other_request_details >95 ;*
- 10- *SELECT gender, emp_first_name, emp_last_name, emp_id, isbn, request_id FROM employee, member_request WHERE request_id=request_id and emp_id >7 and isbn >55 ;*
- 11- *SELECT isbn, book_title, date_of_publication, quantity FROM book, book_at_library WHERE isbn= isbn and member_cls>1 and lib_cls>1 ;*
- 12- *SELECT isbn, library_id FROM book, book_at_library WHERE isbn= isbn and book_title <>45 and lib_cls <>45 ;*
- 13- *SELECT isbn, book_title, member_cls FROM book, book_at_library WHERE isbn= isbn and book_title<> 1 and quantity<100 ;*
- 14- *SELECT book_title, date_of_publication FROM book, book_at_library WHERE isbn= isbn and quantity>5 and isbn <>11 ;*
- 15- *SELECT isbn FROM book, book_at_library WHERE isbn= isbn and quantity >21 and book_title <> 113 ;*
- 16- *SELECT lib_cls, library_id FROM book, book_at_library WHERE isbn= isbn and member_cls <>10 and library_id>43 ;*
- 17- *SELECT isbn, date_of_publication, quantity FROM book, book_at_library WHERE isbn= isbn and isbn <100 and quantity <>3 ;*
- 18- *SELECT book_title FROM book, book_at_library WHERE isbn= isbn and quantity<19 and member_cls <.16 ;*
- 19- *SELECT isbn, lib_cls FROM book, book_at_library WHERE isbn= isbn and isbn<>17 and library <12 ;*
- 20- *SELECT isbn, library_id, member_cls, lib_cls FROM book, book_at_library WHERE isbn= isbn book_title <>17 and quantity<>17 ;*
- 21- *SELECT emp_id, emp_first_name, address, isbn FROM employee, member_request WHERE request_id=request_id and phone>2 and isbn>1;*

- 22- *SELECT* phone, emp_first_name, email_address, isbn, gender, address *FROM* employee, member_request *WHERE* request_id=request_id and emp_id<13 and isbn >5 ;
- 23- *SELECT* member_id, request_id, date_located, date_requested, isbn *FROM* employee, member_request *WHERE* request_id=request_id and emp_id >44 and isbn <50 ;
- 24- *SELECT* member_id, date_located, date_requested, isbn *FROM* employee, member_request *WHERE* request_id=request_id and emp_id <>2 and isbn >2 ;
- 25- *SELECT* emp_id, date_of_birth, address, phone email_address, request_id *FROM* employee, member_request *WHERE* request_id=request_id and gender >2 and other_request_details >2;
- 26- *SELECT* emp_id ,isbn *FROM* employee, member_request *WHERE* request_id=request_id and emp_id>27 <15 and isbn > 55 ;
- 27- *SELECT* request_id, isbn *FROM* employee, member_request *WHERE* request_id=request_id and emp_id >8 and isbn >1 ;
- 28- *SELECT* isbn, request_id requested *FROM* employee, member_request *WHERE* request_id=request_id and emp_id <>25 and isbn >68 ;
- 29- *SELECT* emp_id, date_of_birth, request_id *FROM* employee, member_request *WHERE* request_id=request_id and address >3 and other_request_details <>60 ;
- 30- *SELECT* gender, emp_first_name, emp_last_name, emp_id, isbn, request_id *FROM* employee, member_request *WHERE* request_id=request_id and emp_id <45 and isbn <>19 ;
- 31- *SELECT* isbn, book_title, date_of_publication, quantity *FROM* book, book_at_library *WHERE* isbn= isbn and member_cls>2 and lib_cls>2 ;
- 32- *SELECT* isbn, library_id *FROM* book, book_at_library *WHERE* isbn= isbn and isbn <>19 and lib_cls <>18 ;
- 33- *SELECT* isbn, book_title, member_cls *FROM* book, book_at_library *WHERE* isbn= isbn and book_title<> 37 and library_id >2 ;
- 34- *SELECT* book_title, date_of_publication *FROM* book, book_at_library *WHERE* isbn= isbn and quantity>3 and isbn >3 ;
- 35- *SELECT* isbn *FROM* book, book_at_library *WHERE* isbn= isbn and quantity >39 and book_title <> 13 ;
- 36- *SELECT* lib_cls, library_id *FROM* book, book_at_library *WHERE* isbn= isbn and member_cls <>1 and library_id>75 ;

37- *SELECT isbn, date_of_publication, quantity FROM book, book_at_library WHERE isbn= isbn and isbn <>35 and quantity >23 ;*

38- *SELECT book_title FROM book, book_at_library WHERE isbn= isbn and quantity<5 and member_cls <5 ;*

39- *SELECT isbn, lib_cls FROM book, book_at_library WHERE isbn= isbn and isbn <17 and book_title>5 ;*

40- *SELECT isbn, library_id, member_cls,lib_cls FROM book, book_at_library WHERE isbn= isbn book_title <>44 and quantity >80 ;*

Appendix H

Drawn Sample queries of Class (G 23)

1- *SELECT item_id, item_type FROM item, borrow_item WHERE item_id=item_id and serial_num>8 and quantity<65;*

2- *SELECT item_id, item_desc, serial_num FROM item, borrow_item WHERE item_id=item_id and serial_num<19 and br_quantity <> 55;*

3- *SELECT item_itype, item_desc FROM item, borrow_item WHERE item_id=item_id and serial_num<45 and payment >7;*

4- *SELECT br_dur_date, quantity FROM item, borrow_item WHERE item_id=item_id and serial_num >16 and quantity > 10;*

5- *SELECT br_bur_date,br_return, item_type FROM item, borrow_item WHERE item_id=item_id and serial_num =2 and item_id=1;*

6- *SELECT item_itype, item_desc, serial_num, item_desc. Item_allowed FROM item, borrow_item WHERE item_id=item_id and serial_num <6 and br_late_payment <>15;*

7- *SELECT br_return_date, quantity , item_id FROM item, borrow_item WHERE item_id=item_id and serial_num <> 5 and quantity > 43;*

8- *SELECT item_desc, item_id, serial_num FROM item, borrow_item WHERE item_id=item_id and serial_num >55 and payment <>15;*

9- *SELECT br_dur_date, payment, item_id FROM item, borrow_item WHERE item_id=item_id and serial_num <4 and quantity <> 10;*

- 10- *SELECT br_dur_date, quantity FROM item, borrow_item WHERE item_id=item_id and serial_num >50 and quantity <78;*
- 11- *SELECT item_type, br_dur_date, br_return, late _status FROM item, borrow_item WHERE item_id=item_id and serial_num >44 and quantity <>33;*
- 12- *SELECT quantity FROM item, borrow_item WHERE item_id=item_id and serial_num <12 and payment<>45;*
- 13- *SELECT payment, serial_num FROM item, borrow_item WHERE item_id=item_id and serial_num >66 and quantity <>45;*
- 14- *SELECT item_id, item_desc, serial_num, item_ type FROM item, borrow_item WHERE item_id=item_id and serial_num<8 and quantity <> 19;*
- 15- *SELECT br_return_date, payment FROM item, borrow_item WHERE item_id=item_id and serial_num >33 and quantity <> 44;*
- 16- *SELECT br_dur_date, payment, item_type FROM item, borrow_item WHERE item_id=item_id and serial_num <4 and payment<>21;*
- 17- *SELECT item_type FROM item, borrow_item WHERE item_id=item_id and serial_num = 55and quantity =1;*
- 18- *SELECT item_desc, item_allowed, br_return_date, br_dur FROM item, borrow_item WHERE item_id=item_id and serial_num >66 and quantity <>15;*
- 19- *SELECT item_id,serial_num, quantity, item_desc, item_allowed, payment FROM item, borrow_item WHERE item_id=item_id and serial_num >56 and payment<>12;*
- 20- *SELECT item_id,serial_num, quantity FROM item, borrow_item WHERE item_id=item_id and serial_num <12 and quantity<>13;*
- 21- *SELECT item_id, item_type FROM item, borrow_item WHERE item_id=item_id and serial_num>55 and quantity<80;*
- 22- *SELECT item_id, item_desc, serial_num FROM item, borrow_item WHERE item_id=item_id and serial_num<15 and payment> 1;*
- 23- *SELECT item_itype, item_desc FROM item, borrow_item WHERE item_id=item_id and serial_num<25 and payment >1;*
- 24- *SELECT br_dur_date, quantity FROM item, borrow_item WHERE item_id=item_id and serial_num >4 and quantity > 4;*

- 25- *SELECT* br_bur_date,br_return, item_type *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num =3 and item_id=3;
- 26- *SELECT* item_itype, item_desc, serial_num, item_desc. Item_allowed *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num >15 and quantity=3;
- 27- *SELECT* br_return_date, quantity , item_id *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num =12 and quantity <>7;
- 28- *SELECT* item_desc, item_id, serial_num *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num >10 and item_id <>15;
- 29- *SELECT* br_dur_date, payment, item_id *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num <35 and item_desc <> 95;
- 30- *SELECT* br_dur_date, quantity *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num >12 and item_id>12;
- 31- *SELECT* item_type, br_dur_date, br_return_allowed, late _status *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num >15 and quantity <>45;
- 32- *SELECT* quantity *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num <55 and item_id<>55;
- 33- *SELECT* payment, serial_num *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num >8 and item_id<>60;
- 34- *SELECT* item_id, item_desc, serial_num, item_ type *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num<70 and pyment=5;
- 35- *SELECT* br_return_date, payment *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num >8 and item_id<45;
- 36- *SELECT* br_dur_date, payment, item_type *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num >6 and payment<>20;
- 37- *SELECT* item_type *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num = 13 and quantity >10;
- 38- *SELECT* item_desc, item_allowed, br_return_date, br_dur *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num >14 and quantity <>11;
- 39- *SELECT* item_id,serial_num, quantity, item_desc, item_allowed, payment *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num >18 and payment <>4;

40- *SELECT item_id,serial_num, quantity FROM item, borrow_item WHERE item_id=item_id and serial_num <15 and payment<15;*

Appendix I

Drawn Sample queries of Class (G 24)

- 1- *SELECT item_id, item_type FROM item, borrow_item WHERE item_id=item_id and serial_num>8 and quantity<65;*
- 2- *SELECT item_id, item_desc, serial_num FROM item, borrow_item WHERE item_id=item_id and serial_num<19 and br_quantity <> 55;*
- 3- *SELECT item_itype, item_desc FROM item, borrow_item WHERE item_id=item_id and serial_num<45 and payment >7;*
- 4- *SELECT br_dur_date, quantity FROM item, borrow_item WHERE item_id=item_id and serial_num >16 and quantity > 10;*
- 5- *SELECT br_bur_date,br_return, item_type FROM item, borrow_item WHERE item_id=item_id and serial_num =2 and item_id=1;*
- 6- *SELECT item_itype, item_desc, serial_num, item_desc. Item_allowed FROM item, borrow_item WHERE item_id=item_id and serial_num <6 and br_late_payment <>15;*
- 7- *SELECT br_return_date, quantity , item_id FROM item, borrow_item WHERE item_id=item_id and serial_num <> 5 and quantity > 43;*
- 8- *SELECT item_desc, item_id, serial_num FROM item, borrow_item WHERE item_id=item_id and serial_num >55 and payment <>15;*
- 9- *SELECT br_dur_date, payment, item_id FROM item, borrow_item WHERE item_id=item_id and serial_num <4 and quantity <> 10;*
- 10- *SELECT br_dur_date, quantity FROM item, borrow_item WHERE item_id=item_id and serial_num >50 and quantity <78;*

- 11- *SELECT item_type, br_dur_date, br_return, late_status FROM item, borrow_item WHERE item_id=item_id and serial_num >44 and quantity <>33;*
- 12- *SELECT quantity FROM item, borrow_item WHERE item_id=item_id and serial_num <12 and payment<>45;*
- 13- *SELECT payment, serial_num FROM item, borrow_item WHERE item_id=item_id and serial_num >66 and quantity <>45;*
- 14- *SELECT item_id, item_desc, serial_num, item_type FROM item, borrow_item WHERE item_id=item_id and serial_num<8 and quantity <> 19;*
- 15- *SELECT br_return_date, payment FROM item, borrow_item WHERE item_id=item_id and serial_num >33 and quantity = 44;*
- 16- *SELECT br_dur_date, payment, item_type FROM item, borrow_item WHERE item_id=item_id and serial_num <4 and payment=21;*
- 17- *SELECT item_type FROM item, borrow_item WHERE item_id=item_id and serial_num = 55and quantity =1;*
- 18- *SELECT item_desc, item_allowed, br_return_date, br_dur FROM item, borrow_item WHERE item_id=item_id and serial_num >66 and quantity =15;*
- 19- *SELECT item_id,serial_num, quantity, item_desc, item_allowed, payment FROM item, borrow_item WHERE item_id=item_id and serial_num >56 and payment=12;*
- 20- *SELECT item_id,serial_num, quantity FROM item, borrow_item WHERE item_id=item_id and serial_num <12 and quantity=13;*
- 21- *SELECT item_id, item_type FROM item, borrow_item WHERE item_id=item_id and serial_num>55 and quantity<80;*
- 22- *SELECT item_id, item_desc, serial_num FROM item, borrow_item WHERE item_id=item_id and serial_num<15 and payment> 1;*
- 23- *SELECT item_itype, item_desc FROM item, borrow_item WHERE item_id=item_id and serial_num<25 and payment >1;*
- 24- *SELECT br_dur_date, quantity FROM item, borrow_item WHERE item_id=item_id and serial_num >4 and quantity > 4;*

- 25- *SELECT* br_bur_date,br_return, item_type *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num =3 and quantity=3;
- 26- *SELECT* item_type, item_desc, serial_num, item_desc. Item_allowed *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num >15 and quantity=3;
- 27- *SELECT* br_return_date, quantity , item_id *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num <>12 and quantity <>7;
- 28- *SELECT* item_desc, item_id, serial_num *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num >10 and item_id =15;
- 29- *SELECT* br_dur_date, payment, item_id *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num <35 and quantity =95;
- 30- *SELECT* br_dur_date, quantity *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num >12 and quantity >12;
- 31- *SELECT* item_type, br_dur_date, br_return_allowed, late _status *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num >15 and quantity =45;
- 32- *SELECT* quantity *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num <55 and payment=55;
- 33- *SELECT* payment, serial_num *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num >8 and payment<>60;
- 34- *SELECT* item_id, item_desc, serial_num, item_ type *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num<70 and pyment=5;
- 35- *SELECT* br_return_date, payment *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num >8 and item_id<45;
- 36- *SELECT* br_dur_date, payment, item_type *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num >6 and payment =20;
- 37- *SELECT* item_type *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num = 13 and quantity >10;
- 38- *SELECT* item_desc, item_allowed, br_return_date, br_dur *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num >14 and quantity =11;
- 39- *SELECT* item_id,serial_num, quantity, item_desc, item_allowed, payment *FROM* item, borrow_item *WHERE* item_id=item_id and serial_num >18 and payment=4;

40- *SELECT item_id,serial_num, quantity FROM item, borrow_item WHERE item_id=item_id and serial_num <15 and payment<15;*