Appendix A

Drawn Sample queries of Class (G1.1)

1. \( \text{SELECT address\_id, line1\_number\_building, line2\_number\_street, line3\_area\_locating FROM address WHERE zip\_postcode=5 and city=2;} \)

2. \( \text{SELECT address\_id, line1\_number\_building, line2\_number\_street, line3\_area\_locating, city1 FROM address WHERE zip\_postcode >5 and city=12;} \)

3. \( \text{SELECT city1, country, address\_id FROM address WHERE city1 >1 and city=2;} \)

4. \( \text{SELECT city1, country, address\_id FROM address WHERE city1<>2 and city=2;} \)

5. \( \text{SELECT state\_province, country, address\_id FROM address WHERE line2\_number\_street <> 22 and city=15;} \)

6. \( \text{SELECT other\_address\_details, address\_id FROM address WHERE line2\_number\_street <18 and city=17;} \)

7. \( \text{SELECT city1, country, state\_province, line1\_number\_building, line2\_number\_street, line3\_area\_locating FROM address WHERE city=25 and city<49;} \)

8. \( \text{SELECT country FROM address WHERE city=19 and address\_id=19;} \)

9. \( \text{SELECT country, city1, state\_province FROM address WHERE city=17 and country=22;} \)

10. \( \text{SELECT address\_id, line1\_number\_building FROM address WHERE city=23 and line2\_number\_street=19;} \)

11. \( \text{SELECT author\_id FROM author WHERE author\_id\_cls=1 and author\_first\_name=1;} \)

12. \( \text{SELECT author\_id FROM author WHERE author\_id\_cls=1 and author\_first\_name=2;} \)

13. \( \text{SELECT author\_id, author\_first\_name FROM author WHERE author\_id\_cls=15 and author\_last\_name <21;} \)

14. \( \text{SELECT author\_last\_name, author\_first\_name FROM author WHERE author\_id\_cls=19 and author\_id <21;} \)

15. \( \text{SELECT author\_last\_name, author\_first\_name FROM author WHERE author\_id\_cls=7 and author\_id <>13;} \)

16. \( \text{SELECT author\_id\_cls, author\_last\_name, author\_first\_name FROM author WHERE author\_id\_cls=11 and author\_id <32;} \)
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 quantity_on_stock>3;

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 author_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;

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**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_address 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_postcode < 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, 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_ifirst_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 (G,3)

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_details, 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 > 1 and 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<22 and member_address_id <30;
Appendix D

Drawn Sample queries of Class (G_{14})

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_id>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 (G_{13})

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 = 1 and lib_cls <> 3;

7-  SELECT library_details, library_name FROM library WHERE library_id = 3 and address_id = 3;

8-  SELECT library_details, library_id FROM library WHERE library_id = 12 and address_id < 20;

9-  SELECT * FROM library WHERE library_id = 2 and library_name > 1;

10- SELECT library_name FROM library WHERE library_id = 15 and library_details = 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 >87 and lib_cls<>13;
17- SELECT library_details, library_name FROM library WHERE library_id >19 and address_id=10;

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

19- SELECT * FROM library WHERE library_id >22 and library_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 address_id<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 <>1 and lib_cls<3;

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

28- SELECT library_details, library_id FROM library WHERE library_id <130 and address_id<18;

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

30- SELECT library_name FROM library WHERE library_id <>23 and library_details=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 < 31 and lib_cls <> 3;

37- SELECT library_details, library_name FROM library WHERE library_id < 29 and
    address_id > 5;

38- SELECT library_details, library_id FROM library WHERE library_id < 18 and
    address_id < 50;

39- SELECT * FROM library WHERE library_id < 27 and library_name > 4;

40- SELECT library_name FROM library WHERE library_id < 6 and library_details > 4;

Appendix F

Drawn Sample queries of Class $G_{2,1}$

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_address_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- 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<>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 members_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, isbn 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 2 2)

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;


13- SELECT isbn, book_title, member_cls FROM book, book_at_library WHERE isbn=isbn and book_title>1 and quantity<100;


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, ib_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 and 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 ;


34- SELECT book_title, date_of_publication FROM book, book_at_library WHERE isbn= isbn and quantity>3 and isbn >3 ;


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 ;


40- SELECT isbn, library_id, member_cls,lib_cls FROM book, book_at_library WHERE isbn= isbn and 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 = 55 and 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_type, 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_id, 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 >8 and item_id<>55;

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 payment=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 \( \mathcal{G}_{2.4} \)

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 = 55 and 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` >12 and `item_id` <45;

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 `payment`=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;
SELECT item_id, serial_num, quantity FROM item, borrow_item WHERE item_id=item_id and serial_num <15 and payment<15;