

C++ software for the circuit

```
#include<stdio.h>
```

```
#include<conio.h>
```

```
#include<dos.h>
```

```
main()
```

```
{
```

```
/* initialisation */
```

```
int x;
```

```
/* put all output devices off */
```

```
outportb(0x378,0x00);
```

```
/* title for the thesis */
```

```
textmode(1);
```

```
gotoxy(5,2);
```

```
textcolor(WHITE);
```

```
textbackground(RED);
```

```
cprintf("\n MOHAMED ABDELKADIE      ");
```

```
gotoxy(5,4);
```

```
cprintf("\n  SUDAN UNIVERSITY (CETS)  ");
```

```

gotoxy(2,6);

cprintf("\n    VOIP    ");

textcolor(WHITE+BLINK);

textbackground(BLUE);

gotoxy(5,11);

cprintf("\n    start operation    ");


struct date d;

getdate(&d);

printf("\n\n %d / %d / %d", d.da_day, d.da_mon,d.da_year);


textcolor(WHITE);

textbackground(BLUE);

gotoxy(5,15);

cprintf("\n    ENTER THE COMMAND    ");

delay(9000);


beg:

/* read the output of ( 8870 ) */

x=inportb(0x379);

x=( x & 0xf0 );

x=( x ^ 0x80 );

printf("\n %d",x);

```

```
/* check */  
  
if (kbhit()) goto finish;  
  
if ( x == 16) goto motoron; /* rotate the motor */  
  
if ( x == 32) goto motoroff; /* stop the motor */  
  
if ( x == 48) goto suckeron; /* sucker on*/  
  
if ( x == 64) goto suckeroff; /* sucker off*/  
  
goto beg;
```

```
/* motor ON */  
  
motoron:  
  
clrscr();  
  
textmode(1);  
  
gotoxy(5,20);  
  
textcolor(WHITE+BLINK);  
  
textbackground(RED);  
  
cprintf(" motor rotates \n");  
  
outportb(0x378,0x01);  
  
delay(1000);  
  
goto beg;
```

```
/* motor OFF */  
  
motoroff:  
  
clrscr();  
  
textmode(1);
```

```
gotoxy(5,20);  
  
textcolor(WHITE+BLINK);  
  
textbackground(GREEN);  
  
cprintf(" motor OFF \n");  
  
outportb(0x378,0x00);  
  
delay(1000);  
  
goto beg;
```

```
/* sucker ON */  
  
suckeron:  
  
clrscr();  
  
textmode(1);  
  
gotoxy(5,20);  
  
textcolor(WHITE+BLINK);  
  
textbackground(RED);  
  
cprintf(" sucker ON \n");  
  
outportb(0x378,0x02);  
  
delay(1000);  
  
goto beg;
```

```
/* sucker OFF */  
  
suckeroff:  
  
clrscr();  
  
textmode(1);  
  
gotoxy(5,20);
```

```
textcolor(WHITE+BLINK);
```

```
textbackground(GREEN);
```

```
cprintf(" sucker OFF \n");
```

```
outportb(0x378,0x00);
```

```
delay(1000);
```

```
goto beg;
```

```
finish:
```

```
getch();
```

```
return(0);
```

```
}
```