Computer Science Project File

Session 2016-17

Submitted By:
Devesh Singh
Class: XII-A

On

Graphics and Its applications

Under The Guidence Of

Mrs. Shefali Dhir

(PGT Computer Science)

Board Roll no.:

Vanasthali Public school ,Delhi-110096

C E R T I F I C A T E

This is to certify that **Devesh Singh**
Of Class XII-A has prepared the report on the Project entitled
“”.
The report is the result of his efforts & endeavors. The report is found worthy of acceptance as final project report for the subject Computer Science of Class XII.
He has prepared the report under my guidance.

(Mrs. Shefali Dhir)
PGT (Computer Science)
Vanasthali Public school,
Mayur vihar phase-3
Delhi-10096

C E R T I F I C A T E

The project report entitled
“”,
Submitted by **Devesh Singh**
of Class XII A for the
CBSE Senior Secondary Examination class XII
of
Computer Science at Vanasthali Public School
has been examined.

SIGNATURE OF EXAMINER

D E C L A R A T I O N

I hereby declare that the
project work entitled
“”,
Submitted to ,
Vanasthali Public School,
Mayur Vihar phase-3,
Delhi-110096
is prepared by me. All the coding are
result of my personal efforts.

DEVESH SINGH
Class XII A

ACKNOWLEDGEMENT

"Gratitude is the fairest blossom which springs from the soul"

I would like to express a deep sense of thanks & gratitude to my project guide Mrs. Shefali Dhir Ma'am for guiding me immensely through the course of the project. She always evinced keen interest in my work. Her constructive advice & constant motivation have been responsible for the successful completion of this project.

My sincere thanks goes to Anuradha Ma'am, Our principal, for her co-ordination in extending every possible support for the completion of this project.

I also thanks to my parents for their motivation & support. I must thanks to my classmates for their timely help & support for compilation of this project.

Last but not the least, I would like to thank all those who had helped directly or indirectly towards the completion of this project.

Devesh Singh
Class: XII-A

C O N T E N T S

1. HEADER FILES USED. . . . . .
2. WORKING DESCRIPTION. . . . . .
3. CODING. . . . .
4. OUTPUT SCREENS. . . . . .
5. LIMITATIONS. . . . . .

HEADER FILES USED

- <IOSTREAM.H

For the basic C++ streams (I/O) routines.(cin,cout etc.)

- <STDIO.H

For defining types and macros needed for the Standard I/O rountines and stream-level I/O routines.

- <CONIO.H

For MS-DOS Console IO Functions

Like clrscr function.

- <GRAPHICS.H

All graphics related functions are

declared using this!

- <DOS.H>

for handling interrupts, producing sound, date and time functions etc.

- <STDLIB.H

For Standard Library functions including conversion and search/sort routines

- <PROCESS.H

For declarations of the spawn... and exec... functions. Like exit function.

- MATH.H

For doing Mathematical operations.

WORKING DESCRIPTION

THIS PROJECT AS WHOLE IS

ABOUT THE BASIC FUNCTIONS IN

GRAPHISC.H IN C++

AND HOW CAN WE USE THEM IN

AN INNOVATIVE WAY. THIS IS A

BASIC PROJECT ABOUT GRAPHICS

IN C++.

THIS **PROJECT** CONSISTS OF 7 OPTIONS THAT HAVE SOMETHING NEW ND DIFFERENT FOR YOU ~~~~~>

1. REFLECTION

2. REFRACTION

3. HAVE FUN (DRAWING)

4. SEE YOUR HEART BEATS

5. PACMAN

6. PIANO

7. EXIT

AND ATLAST A SURPRISE FOR YOU! ☺

C O D E

```
#include<iostream.h>
#include<stdio.h>
#include<conio.h>
#include<graphics.h>
#include<dos.h>
#include<stdlib.h>
#include<process.h>
#include<math.h>
int side=10,top=10,i=30,j=30,l=0,q,score,x,y;
int t=300,z=230,m=200;

void page1();
void page2();
void page3();
void project();
void refraction();
void reflection();
void concave_mirror();
void convex_mirror();
void convex_lens();
void concave_lens();
void define_reflection();
void define_refraction();
```

```
void menu();
void draw();
void menu2();
void circle();
void line();
void rectangle();
void arc();
void  ellipse();
void beat();
void moveit();
void move();
void line1();
void piano();
void menu1();
void virus();
void lol();

void main()
{
int gdriver = DETECT,gmode;
initgraph(&gdriver,&gmode,"C:\\TC\\BGI");


page1();                    //the first page
cleardevice();
```

```
page2();                //the second page
cleardevice();

page3();                //the third page
cleardevice();
project();
getch();
}
/*****************THE FIRST PAGE*********************************/
void page1()
{       int x,y,i;
x=getmaxx()/4;
y=getmaxy()/2;
int    m=0, p=0, q=180,      r=0;

char l[]="COMPUTER SCIENCE PROJECT";

setfillstyle(INTERLEAVE_FILL,RED);
settextstyle(GOTHIC_FONT, HORIZ_DIR,5);
setcolor(RED);
outtextxy(-10,20,l);
gotoxy(-10,10);
delay(30);


for(i=35;i<160;i++,m++,r++,p=+15,q=-15)
```

```
{
setbkcolor(r/8);
setcolor(m/15);
delay(30);
arc(x,y,p,q,i);
}

setfillstyle(BKSLASH_FILL,RED);
bar(400,175,425,300);
delay(100);
setfillstyle(BKSLASH_FILL,GREEN);
bar(350,225,475,250);
delay(100);
setfillstyle(BKSLASH_FILL,RED);
bar(550,175,575,300);
delay(100);
setfillstyle(BKSLASH_FILL,GREEN);
bar(500,225,625,250);
settextstyle(SMALL_FONT, HORIZ_DIR,random(2)+5);
setcolor(MAGENTA);
outtextxy(400,400,"PRESS 'ENTER' TO MOVE NEXT");
getch();
}
```

```
/**********************THE SECOND PAGE**************************/
void page2()
{
setbkcolor(BLACK);
setfillstyle(SOLID_FILL,RED);
setcolor(RED);
setlinestyle(SOLID_LINE,1213,THICK_WIDTH);
bar(1,380,650,600);

setcolor(MAGENTA);
setlinestyle(USERBIT_LINE,1320345142321423,THICK_WIDTH);
delay(30);
line(10,1,10,500);
delay(30);
line(15,1,15,500);
delay(30);
line(1,10,650,10);
delay(30);
line(1,15,650,15);
delay(30);
line(630,1,630,500);
delay(30);
line(625,1,625,500);
delay(30);
line(1,455,650,455);
delay(30);
```

```
line(1,450,650,450);
delay(50);

settextstyle(TRIPLEX_SCR_FONT,   VERT_DIR, 5);
setcolor(YELLOW);
outtextxy(550,20,"INTRODUCTION");
delay(70);
line(580,30,580,370);

setfillstyle(SOLID_FILL,BLACK);
setcolor(BLUE);
setlinestyle(DOTTED_LINE,1213,THICK_WIDTH);
int p=100, q=150,     r=400,     s=250,     z=5,  t=100;
for(int i=0;i<10;i++)
{
bar3d(p,q,r,s,z,5);
delay(100);
p=p-10;
q=q-10;
r=r+10;
s=s+10;
z=z+5;
}

settextstyle(SMALL_FONT, HORIZ_DIR, 5);
setcolor(YELLOW);
```

```
char a[]="\n\n\n\n\n\n   This Project Is a Result Of Dedicated Efforts.
\n\n   Thanks TO COMPUTER SCIENCE TEANCHER, SEFAHLI  MAM
\n\n   And Also I Would Like TO Thank Her For Consultative \n\n
Help And Constructive Suggestions. \n\n   THE INTERNET Is Also Proved
To Be A Great Treasure To \n\n    Arrange Pearls For MY PROJECT:";


for(i=0;a[i]!='\0';i++)
{       cout<<a[i];
delay(20);
//sound(t);
t=t+10;
}
while(!kbhit())
{       delay(40);
putpixel(random(640),random(548),random(35));
}
nosound();
settextstyle(SMALL_FONT, HORIZ_DIR,random(2)+5);
setcolor(BLUE);
outtextxy(400,400,"PRESS 'ENTER' TO MOVE NEXT");
getch();
}
/*******************THE THIRD PAGE*********************************/
void page3()
{       int x,z;
float y;
```

```
setlinestyle(DASHED_LINE,1320345,NORM_WIDTH);
for(int mn=0;mn<=25;mn++)
{       if(mn%5==0)
{       clrscr();
}
setbkcolor(RED);
arc(300,250,random(150),random(150)+320,random(130));
settextstyle(TRIPLEX_SCR_FONT, HORIZ_DIR,random(8));
setcolor(mn);
outtextxy(350,250,"LOADING.....");
delay(100);
}
settextstyle(SMALL_FONT, HORIZ_DIR,random(2)+5);
setcolor(BLUE);
outtextxy(400,400,"PRESS 'ENTER' TO MOVE NEXT");
getch();
}
/**************************project*******************************/
void project()
{       int x=20;
int y=20;
float j=1;
int ch;

setcolor(MAGENTA);
```

```
setlinestyle(USERBIT_LINE,1320345142321423,THICK_WIDTH);
delay(30);
line(10,1,10,500);
delay(30);
line(15,1,15,500);
delay(30);
line(1,10,650,10);
delay(30);
line(1,15,650,15);
delay(30);
line(630,1,630,500);
delay(30);
line(625,1,625,500);
delay(30);
line(1,455,650,455);
delay(30);
line(1,450,650,450);
delay(50);


cleardevice();
settextstyle(TRIPLEX_FONT, 1,8);
setbkcolor(RED);
setcolor(YELLOW);
delay(1000);
outtextxy(100,100,"CHOOSE");
delay(500);
```

```
setcolor(GREEN);
setlinestyle(USERBIT_LINE,1320345142321423,THICK_WIDTH);
delay(30);
line(10,1,10,500);
delay(30);
line(15,1,15,500);
delay(30);
line(1,10,650,10);
delay(30);
line(1,15,650,15);
delay(30);
line(630,1,630,500);
delay(30);
line(625,1,625,500);
delay(30);
line(1,455,650,455);
delay(30);
line(1,450,650,450);
delay(50);
menu();
getch();
}

void menu()
{       int ch;
```

```
cleardevice();
settextstyle(TRIPLEX_FONT, 1,8);
setbkcolor(RED);
setcolor(YELLOW);
delay(1000);
outtextxy(100,100,"CHOOSE");
delay(500);

setcolor(GREEN);
setlinestyle(USERBIT_LINE,1320345142321423,THICK_WIDTH);
delay(30);
line(10,1,10,500);
delay(30);
line(15,1,15,500);
delay(30);
line(1,10,650,10);
delay(30);
line(1,15,650,15);
delay(30);
line(630,1,630,500);
delay(30);
line(625,1,625,500);
delay(30);
line(1,455,650,455);
delay(30);
line(1,450,650,450);
```

```
delay(50);


setcolor(LIGHTMAGENTA);
settextstyle(SMALL_FONT, 0,8);
outtextxy(300,100,"1. REFLECTION");
outtextxy(302,102,"1. REFLECTION");
delay(200);
outtextxy(300,175,"2. REFRACTION");
outtextxy(302,177,"2. REFRACTION");
delay(200);
outtextxy(300,250,"3. HAVE FUN (DRAWING)");
outtextxy(302,252,"3. HAVE FUN (DRAWING)");
delay(200);
outtextxy(300,285,"4. SEE YOUR HEART BEATS");
outtextxy(302,287,"4. SEE YOUR HEART BEATS");
delay(200);
outtextxy(300,320,"5. PACMAN");
outtextxy(302,322,"5. PACMAN");
delay(200);
outtextxy(300,355,"6. PIANO");
outtextxy(302,357,"6. PIANO");
delay(200);
outtextxy(300,390,"7. EXIT");
outtextxy(302,392,"7. EXIT");


settextstyle(DEFAULT_FONT, 0,1);
```

```
outtextxy(340,135,"* By Concave Mirror");
outtextxy(340,150,"* By Convex Mirror");
outtextxy(340,210,"* By Convex Lens");
outtextxy(340,225,"* By Concave Lens");
cin>>ch;
switch(ch)
{       case 1:       cleardevice();
reflection();
menu();
break;

case 2:               cleardevice();
refraction();
menu();
break;

case 3:       cleardevice();
draw();
menu();
break;

case 4:               cleardevice();
beat();
menu();

case 5:               cleardevice();
```

```
move();
menu();

case 6:                cleardevice();
piano();
menu();

case 7:        cleardevice();
int pq=0;
for(int lt=0;lt<800;lt++)
{      setcolor(pq);
if(lt%25==0)
{      pq++;      delay(80);
}
line(lt,0,lt,500);
}
cleardevice();
virus();
setbkcolor(DARKGRAY);
cleardevice();
setbkcolor(RED);
clrscr();
setcolor(MAGENTA);
settextstyle(TRIPLEX_FONT,0,9);
outtextxy(50,100,"THANK YOU");
outtextxy(52,102,"THANK YOU");
```

```
setcolor(BLUE);
settextstyle(SMALL_FONT,0,9);
outtextxy(252,232,"A PROJECT BY HIMANSHU");
outtextxy(260,260,"AND DEVESH");
outtextxy(252,312,"CLASS:   XII-A");
delay(2000);
closegraph();
exit(0);

}
}


void refraction()
{
define_refraction();
delay(1000);

convex_lens();
delay(1000);

concave_lens();
delay(1000);

getch();
}
```

```
void define_refraction()
{       setbkcolor(YELLOW);
setcolor(RED);
settextstyle(TRIPLEX_FONT,0,5);
delay(230);
outtextxy(210,40,"REFRACTION");
delay(230);

setcolor(BLUE);
setlinestyle(USERBIT_LINE,1320345142321423,THICK_WIDTH);
delay(30);
line(10,1,10,500);
delay(30);
line(15,1,15,500);
delay(30);
line(1,10,650,10);
delay(30);
line(1,15,650,15);
delay(30);
line(630,1,630,500);
delay(30);
line(625,1,625,500);
delay(30);
line(1,455,650,455);
delay(30);
```

```
line(1,450,650,450);
delay(50);


setcolor(BLUE);
settextstyle(SMALL_FONT,0,7);
outtextxy(30,130,"The Bending of Light on Passing Through the Medium
");
outtextxy(80,170,"of Different Refractive Index is Called");
outtextxy(160,210,"REFRACTION of LIGHT.");
outtextxy(80,280,"*--->       REFRACTION by CONVEX LENS");
outtextxy(80,320,"*--->       REFRACTION by CONCAVE LENS");
delay(1000);


getch();
}


void convex_lens()
{      setbkcolor(RED);
settextstyle(DEFAULT_FONT,0,1);
int a=3,b=30;
for(int i=0;i<10;i++)
{      clrscr();
setcolor(BLUE);
setlinestyle(SOLID_LINE,1,THICK_WIDTH);
ellipse(300,200,100,260,a,b);
ellipse(290,200,280,80,a,b);
```

```
delay(100);
a=a+3;
b=b+5;
}
setcolor(YELLOW);
settextstyle(BOLD_FONT,0,1);
outtextxy(50,40,"REFRACTION BY A CONVEX LENS");

settextstyle(DEFAULT_FONT,0,1);
setcolor(BLUE);
outtextxy(250,280,"CONVEX LENS");

outtextxy(290,203,"+");

outtextxy(280,210,"POLE");

setlinestyle(SOLID_LINE,1,NORM_WIDTH);
delay(200);
line(50,205,600,205);
outtextxy(10,208,"PRINCIPLE AXIS");

setcolor(RED);

outtextxy(100,160,"LIGHT RAYS");
line(50,175,293,175);
delay(200);
```

```
line(293,175,500,205);
outtextxy(250,172,">");
delay(150);

line(50,145,293,145);
delay(200);
line(293,145,500,205);
outtextxy(250,142,">");
delay(150);

outtextxy(100,245,"LIGHT RAYS");
line(50,235,293,235);
delay(200);
line(293,235,500,205);
outtextxy(250,232,">");
delay(150);

line(50,260,293,260);
delay(200);
line(293,260,500,205);
outtextxy(250,258,">");
outtextxy(480,215,"FOCUS");

getch();
}
```

```
void concave_lens()
{       setbkcolor(RED);
settextstyle(DEFAULT_FONT,0,1);
int a=33,b=80;
for(int i=0;i<10;i++)
{       clrscr();
setcolor(BLUE);
setlinestyle(SOLID_LINE,1,THICK_WIDTH);
ellipse(320,200,100,260,a,b);
ellipse(270,200,280,80,a,b);
delay(100);
a=a-2;
}
outtextxy(270,280,"~~~~~~~");
outtextxy(270,117,"~~~~~~~");
setcolor(YELLOW);
settextstyle(BOLD_FONT,0,1);
outtextxy(50,40,"REFRACTION BY A CONCAVE LENS");

settextstyle(DEFAULT_FONT,0,1);
setcolor(BLUE);
outtextxy(250,290,"CONCAVE LENS");

outtextxy(290,203,"+");

outtextxy(280,210,"POLE");
```

```
setlinestyle(SOLID_LINE,1,NORM_WIDTH);
delay(200);
line(50,205,600,205);
outtextxy(10,208,"PRINCIPLE AXIS");

setcolor(RED);

outtextxy(100,160,"LIGHT RAYS");
line(50,175,293,175);
delay(200);
line(293,175,123,140);
outtextxy(250,172,">");
delay(150);

line(50,145,293,145);
delay(200);
line(293,145,123,100);
outtextxy(250,142,">");
delay(150);

outtextxy(100,245,"LIGHT RAYS");
line(50,235,293,235);
delay(200);
line(293,235,123,285);
outtextxy(250,232,">");
```

```
delay(150);

line(50,260,293,260);
delay(200);
line(293,260,123,325);
outtextxy(250,258,">");
outtextxy(405,215,"FOCUS");

setlinestyle(1,123321,NORM_WIDTH);
line(293,175,400,205);
delay(100);
line(293,145,400,205);
delay(100);
line(293,235,400,205);
delay(100);
line(293,260,400,205);
delay(100);
getch();
}


void reflection()
{
define_reflection();
delay(1000);
setbkcolor(RED);
```

```
concave_mirror();
delay(1000);

convex_mirror();
delay(1000);

getch();
}

void define_reflection()
{       setbkcolor(YELLOW);
setcolor(RED);
settextstyle(TRIPLEX_FONT,0,5);
delay(230);
outtextxy(210,40,"REFLECTION ");
delay(230);

setcolor(MAGENTA);
setlinestyle(USERBIT_LINE,1320345142321423,THICK_WIDTH);
delay(30);
line(10,1,10,500);
delay(30);
line(15,1,15,500);
delay(30);
line(1,10,650,10);
```

```
delay(30);
line(1,15,650,15);
delay(30);
line(630,1,630,500);
delay(30);
line(625,1,625,500);
delay(30);
line(1,455,650,455);
delay(30);
line(1,450,650,450);
delay(50);

setcolor(BLUE);
settextstyle(SMALL_FONT,0,7);
outtextxy(40,130,"The Bouncing Back of Light After Striking Any ");
outtextxy(80,170,"Surface is Called REFLECTION of Light.");
outtextxy(80,240,"*~~~>       REFLECTION by CONCAVE MIRROR");
outtextxy(80,280,"*~~~>       REFLECTION by CONVEX MIRROR");
delay(1000);

getch();
}



void concave_mirror()
```

```
{
int a=3,b=30;
for(int i=0;i<10;i++)
{       clrscr();
setcolor(BLUE);
setlinestyle(SOLID_LINE,1,THICK_WIDTH);
ellipse(450,200,280,80,a,b);
delay(100);
a=a+3;
b=b+5;
}
setcolor(YELLOW);
settextstyle(BOLD_FONT,0,1);
outtextxy(50,40,"REFLECTION BY A CONCAVE MIRROR");

settextstyle(0,0,1);
setcolor(DARKGRAY);

setlinestyle(USERBIT_LINE,1233729372321,NORM_WIDTH);
int p=448;
for(i=0;i<5;i++)
{       ellipse(p,200,280,80,33,80);
p++;
}
outtextxy(400,290,"CONCAVE MIRROR");
```

```
setcolor(BLUE);

setlinestyle(SOLID_LINE,1,NORM_WIDTH);
delay(200);
line(50,205,480,205);
outtextxy(10,208,"PRINCIPLE AXIS");

setcolor(RED);

outtextxy(100,160,"LIGHT RAYS");
line(50,145,472,145);
delay(200);
line(472,145,350,205);
outtextxy(250,142,">");
delay(150);

outtextxy(100,265,"LIGHT RAYS");
line(50,260,472,260);
delay(200);
line(472,260,350,205);
outtextxy(250,257,">");
delay(150);

outtextxy(309,208,"FOCUS");

getch();
```

```
}

void convex_mirror()
{       int e=3,f=30;
for(int i=0;i<10;i++)
{       clrscr();
setcolor(BLUE);
setlinestyle(SOLID_LINE,1,THICK_WIDTH);
ellipse(500,200,100,260,e,f);
delay(100);
e=e+3;
f=f+5;
}

setcolor(YELLOW);
settextstyle(BOLD_FONT,0,1);
outtextxy(50,40,"REFLECTION BY A CONVEX MIRROR");

settextstyle(0,0,1);
setcolor(DARKGRAY);

setlinestyle(USERBIT_LINE,1233729372321,NORM_WIDTH);
int p=505;
for(i=0;i<5;i++)
{       ellipse(p,200,100,260,33,80);
p++;
```

```
}
outtextxy(460,290,"CONVEX MIRROR");

setcolor(BLUE);

setlinestyle(SOLID_LINE,1,NORM_WIDTH);
delay(200);
line(50,205,600,205);
outtextxy(10,208,"PRINCIPLE AXIS");

setcolor(RED);

outtextxy(100,160,"LIGHT RAYS");
line(50,145,472,145);
delay(200);
line(472,145,350,75);
outtextxy(250,142,">");
delay(150);

outtextxy(100,265,"LIGHT RAYS");
line(50,260,472,260);
delay(200);
line(472,260,350,325);
outtextxy(250,257,">");
delay(150);
```

```
setlinestyle(DOTTED_LINE,1,NORM_WIDTH);
line(472,260,552,205);
line(472,145,552,205);

outtextxy(540,212,"FOCUS");

getch();
}


void draw()
{       int gdriver = DETECT,gmode;
initgraph(&gdriver,&gmode,"C:\\TC\\BGI");

int t=55;
line(55,0,55,500);
line(0,55,700,55);
for(int i=0;i<14;i++)
{
line(t,10,t,55);
t=t+50;
}
t=55;
for(i=0;i<14;i++)
{
line(0,t,55,t);
```

```
t=t+50;
}

t=40;int *a;   char  p[2];
outtextxy(35,95,"1");
outtextxy(35,145,"2");
outtextxy(35,195,"3");
outtextxy(35,245,"4");
outtextxy(35,295,"5");
outtextxy(35,345,"6");
outtextxy(35,395,"7");
outtextxy(35,445,"8");
outtextxy(35,495,"9");

outtextxy(89,40,"1");
outtextxy(139,40,"2");
outtextxy(189,40,"3");
outtextxy(239,40,"4");
outtextxy(289,40,"5");
outtextxy(339,40,"6");
outtextxy(389,40,"7");
outtextxy(439,40,"8");
outtextxy(489,40,"9");
outtextxy(539,40,"10");
outtextxy(589,40,"11");
outtextxy(639,40,"12");
```

```
outtextxy(689,40,"13");
menu2();
getch();
}



void menu2()
{       int ch;
setfillstyle(1,BLACK);
outtextxy(500,340,"1. line");
outtextxy(500,360,"2. circle");
outtextxy(500,380,"3. rectangle");
outtextxy(500,400,"4. arc");
outtextxy(500,420,"5. ellipse");
outtextxy(500,440,"6. exit");
outtextxy(500,470,"enter your choice");
cin>>ch;


switch(ch)
{       case 1:
bar(40,56,650,80);
line();
menu2();
break;
```

```
case 2:

bar(40,56,650,80);
circle();
menu2();
break;

case 3:

bar(40,56,650,80);
rectangle();
menu2();

break;

case 4:
bar(40,56,650,80);
arc();
menu2();

case 5:
bar(40,56,650,80);
ellipse();
menu2();
case 6:
bar(40,56,650,80);
```

```
menu();
exit(1);
}



getch();

}

void line()
{       int a,b,c,d,x1,x2,y1,y2;
outtextxy(50,60," coordinates:  x1   y1   x2   y2\n");
cin>>a>>b>>c>>d;
x1=a*50+55;
y1=b*50+55;
x2=c*50+55;
y2=d*50+55;
line(x1,y1,x2,y2);
getch();
}

void circle()
{       int a,b,c,x,y;
float r;
outtextxy(50,60," coordinates for centre:  x   y    and radius r");
```

```
cin>>a>>b>>c;
x=a*50+55;
y=b*50+55;
r=c+55;
circle(x,y,r);
getch();
}

void rectangle()
{       int a,b,c,d,x1,x2,y1,y2;
outtextxy(50,60," coordinates:  x1   y1   x2   y2\n");
cin>>a>>b>>c>>d;
x1=a*50+55;
y1=b*50+55;
x2=c*50+55;
y2=d*50+55;
rectangle(x1,y1,x2,y2);
getch();
}



void arc()
{       int a,b,c,d,e,x1,y1,a1,a2;
float r;
```

```
outtextxy(50,60," coordinates:  x1   y1  starting angle a1  ending angle
a2   radius r ");

cin>>a>>b>>c>>d>>e;

x1=a*50+55;

y1=b*50+55;

a1=c;

a2=d;

r=e*50+55;

arc(x1,y1,a1,a2,r);

getch();

}


void ellipse()

{      int a,b,c,d,e,f,x1,y1,a1,a2,r1,r2;

outtextxy(50,60," coordinates:  x1   y1  start angle a1  end angle a2
radius up and sides r1 r2");

cin>>a>>b>>c>>d>>e>>f;

x1=a*50+55;

y1=b*50+55;

a1=c;

a2=d;

r1=e*25+55;

r2=f*25+55;

ellipse(x1,y1,a1,a2,r1,r2);

getch();

}
```

```
char d[20],b[20];
int k,n,i1,j1,p,a[4][4];



void beat()
{
int i=getmaxx();
int j=getmaxy();
setbkcolor(GREEN);
settextstyle(BOLD_FONT,HORIZ_DIR,4);
setcolor(RED);
outtextxy(200,30,"HEART BEAT");
setlinestyle(SOLID_LINE,1,2);
line(0,200,i,200);
rectangle(0,0,i,j);
moveto(0,200);
setcolor(WHITE);
int p=0;
setlinestyle(SOLID_LINE,1,2);
while(!kbhit())
{   int t=80+random(230);
delay(120);
settextstyle(BOLD_FONT,HORIZ_DIR,1);
setfillstyle(SOLID_FILL,BLACK);
bar(170,10,i,100);
```

```
setcolor(RED);
outtextxy(200,30,"HEART BEAT");
setcolor(WHITE);
moveto(p-5,200);
lineto(p,t);
lineto(p+5,200);
delay(120);
settextstyle(BOLD_FONT,HORIZ_DIR,4);
setcolor(YELLOW);
bar(150,20,i,100);
outtextxy(170,10,"HEART BEAT");
p+=10;
}
getch();
}

void move()
{int p=DETECT,q;
initgraph(&p,&q,"");
setbkcolor(GREEN);
for(int sc=0;sc<5;sc++)
{      x=30+random(55)*10;
y=30+random(38)*10;
circle(x,y,5);
for(;;l++)
{   moveit();
```

```
if(x==i&&y==j)
{    cleardevice();
score++;
gotoxy(1,1);
sound(1000);
delay(40);
nosound();
cout<<"score->"<<score;
break;
 }
if(i==550||j==450||i==20||j==20)
{      settextstyle(BOLD_FONT,0,2);
sound(100);
delay(100);
nosound();
outtextxy(100,100,"OOPS! YOU LOST IT");
menu();
break;
}
delay(80);
cleardevice();
}
if(i==550||j==450||i==20||j==20)
{      settextstyle(BOLD_FONT,0,2);
outtextxy(100,100,"OOPS! YOU LOST IT");
menu();
```

```
break;
}
}
getch();
closegraph();
}

void moveit()
{    char ch,gh;
ch=getch();
if(ch=='d'||ch=='D')
{     gotoxy(3,3);
cout<<"score->"<<score;

line1();

side++;
i=side*10;
setcolor(RED);
circle(x,y,5);

setfillstyle(SOLID_FILL,YELLOW);
if(l%2==0)
{              pieslice(i,j,45,315,10);
sound(800); delay(20);nosound();  }
else
```

```
{               pieslice(i,j,0,360,10);
sound(600);   delay(20);      nosound(); }
}

if(ch=='A'||ch=='a')
{     gotoxy(3,3);
cout<<"score->"<<score;
line1();
side--;
i=side*10;
circle(x,y,5);
setcolor(RED);
setfillstyle(SOLID_FILL,YELLOW);
if(l%2==0)
{     pieslice(i,j,225,360,10);
pieslice(i,j,360,135,10);
sound(800);  delay(20);      nosound();
}
else
{     pieslice(i,j,180,360,10);
pieslice(i,j,360,180,10);
sound(600);   delay(20);      nosound();
}
}

if(ch=='s'||ch=='S')
```

```
{      gotoxy(3,3);
cout<<"score->"<<score;
line1();
circle(x,y,5);
top++;
j=top*10;
setcolor(RED);
setfillstyle(SOLID_FILL,YELLOW);
if(l%2==0)
{      pieslice(i,j,315,360,10);
pieslice(i,j,360,225,10);
sound(800);   delay(20);      nosound();
}
else
{      pieslice(i,j,270,360,10);
pieslice(i,j,360,270,10);
sound(600);   delay(20);      nosound();
}
}

if(ch=='w'||ch=='W')
{      gotoxy(3,3);
cout<<"score->"<<score;
line1();
top--;
j=top*10;
```

```
circle(x,y,5);
setcolor(RED);

setfillstyle(SOLID_FILL,YELLOW);
if(l%2==0)
{       pieslice(i,j,135,360,10);
pieslice(i,j,360,35,10);
sound(800);   delay(20);        nosound();
}
else
{       pieslice(i,j,90,360,10);
pieslice(i,j,360,90,10);
sound(600); delay(20); nosound();
}
}


getch();
}

void line1()
{
setfillstyle(HATCH_FILL,RED);


setlinestyle(SOLID_LINE,1320345142321423,THICK_WIDTH);
```

```
bar(580,0,650,500);
bar(0,450,600,500);
bar(0,0,660,20);
bar(0,0,20,450);
getch();
}

void piano()
{
int x,y,i;

cout<<"\n press signs ,numeric and alphabetic key\n";
nosound();
menu1();
nosound();
getch();
}

void menu1()
{      char nh;
cleardevice();
setbkcolor(BLACK);
setlinestyle(SOLID_LINE,1,THICK_WIDTH);
nh=getch();
setcolor(random(15));
circle(random(t),random(z),random(m));
```

```
circle(random(t),random(z),random(m));
circle(random(t),random(z),random(m));
circle(random(t),random(z),random(m));
setfillstyle(random(10),random(15));
bar3d(200,100+random(200),240,400,12,12);
setfillstyle(random(10),random(15));
bar3d(240,100+random(200),280,400,12,12);
setfillstyle(random(10),random(15));
bar3d(280,100+random(200),320,400,12,12);
setfillstyle(random(10),random(15));
bar3d(320,100+random(200),360,400,12,12);
setfillstyle(random(10),random(15));
bar3d(360,100+random(200),400,400,12,12);
setfillstyle(random(10),random(15));
bar3d(400,100+random(200),440,400,12,12);
setfillstyle(random(10),random(15));
bar3d(440,100+random(200),480,400,12,12);
switch(nh)
{     case ' ':        a1:
sound(231);delay(100); sound(233);delay(100);
sound(235);delay(100);
while(!kbhit){
goto a1; }

//1
```

```
menu1();
break;
case '`':       a2:
sound(244);delay(100); sound(246);delay(100);
sound(248);delay(100);
while(!kbhit){
goto a2; }
//1

menu1();
break;
case '1':       a3:
sound(259);delay(100); sound(261);delay(100);
sound(263);delay(100);
while(!kbhit){
goto a3; }

//1

menu1();
break;
case  '2':      a4:
sound(273);delay(100); sound(277);delay(100);
sound(279);delay(100);
while(!kbhit){
goto a4; }
```

```
//1


menu1();

break;

case '3':       a5:

sound(291);delay(100); sound(293);delay(100);
sound(295);delay(100);

while(!kbhit){

goto a5; }


//1


menu1();

break;

case '4':       a6:

sound(327);delay(100); sound(329);delay(100);
sound(331);delay(100);

while(!kbhit){

goto a6; }

//1


menu1();

break;

case '5':       a7:

sound(347);delay(100); sound(349);delay(100);
sound(351);delay(100);

while(!kbhit){
```

```
goto a7; }


//1


menu1();
break;
case '6':       a8:
sound(367);delay(100); sound(369);delay(100);
sound(371);delay(100);
while(!kbhit){
goto a8; }


//1


menu1();
break;
case '7':       a9:
sound(389);delay(100); sound(391);delay(100);
sound(393);delay(100);
while(!kbhit){
goto a9; }
//1


menu1();
break;
case '8':       b1:
```

```
sound(413);delay(100); sound(415);delay(100);
sound(417);delay(100);

while(!kbhit){

goto b1; }


//1


menu1();break;

case '9':       b2:

sound(438);delay(100); sound(440);delay(100);
sound(442);delay(100);

while(!kbhit){

goto b2; }


//1


menu1();break;

case '0':       b3:

sound(464);delay(100); sound(466);delay(100);
sound(468);delay(100);

while(!kbhit){

goto b3; }


//1


menu1();break;

case '-':       b4:
```

```
sound(491);delay(100); sound(493);delay(100);
sound(495);delay(100);

while(!kbhit){

goto b4; }


//1


menu1();break;

case '=':      b5:

sound(552);delay(100); sound(554);delay(100);
sound(556);delay(100);

while(!kbhit){

goto b5; }


//1


menu1();break;

case 'q':      b6:

sound(585);delay(100); sound(587);delay(100);
sound(589);delay(100);

while(!kbhit){

goto b6; }


//1


menu1();break;

case 'w':      b7:
```

```
sound(620);delay(100); sound(622);delay(100);
sound(624);delay(100);

while(!kbhit){

goto b7; }


//1


menu1();break;

case 'e':       b8:

sound(657);delay(100); sound(661);delay(100);
sound(663);delay(100);

while(!kbhit){

goto b8; }


//1


menu1();break;

case 'r':       b9:

sound(696);delay(100); sound(698);delay(100);
sound(700);delay(100);

while(!kbhit){

goto b9; }


//1


menu1();break;

case 't':       c1:
```

```
sound(737);delay(100); sound(739);delay(100);
sound(741);delay(100);

while(!kbhit){

goto c1; }


//1


menu1();   break;

case 'y':      c2:

sound(781);delay(100); sound(783);delay(100);
sound(785);delay(100);

while(!kbhit){

goto c2; }


//1


menu1();break;

case 'u':      c3:

sound(878);delay(100); sound(880);delay(100);
sound(882);delay(100);

while(!kbhit){

goto c3; }


//1


menu1();   break;

case 'i':      c4:
```

```
sound(930);delay(100); sound(932);delay(100);
sound(934);delay(100);

while(!kbhit){

goto c4; }


//1


menu1();break;

case 'o':       c5:

sound(985);delay(100); sound(987);delay(100);
sound(989);delay(100);

while(!kbhit){

goto c5; }


//1


menu1();break;

case 'p':       c6:

sound(1106);delay(100); sound(1108);delay(100);
sound(1110);delay(100);

while(!kbhit){

goto c6; }


//1


menu1();break;

case '[':       c7:
```

```
sound(1172);delay(100); sound(1174);delay(100);
sound(1176);delay(100);

while(!kbhit){

goto c7; }


//1


menu1();break;

case ']':       c8:

sound(1242);delay(100); sound(1244);delay(100);
sound(1246);delay(100);

while(!kbhit){

goto c8; }


//1


menu1();break;

case 'a':       c9:

sound(1316);delay(100); sound(1318);delay(100);
sound(1320);delay(100);

while(!kbhit){

goto c9; }


//1


menu1();break;

case 's':       d1:
```

```
sound(1394);delay(100); sound(1396);delay(100);
sound(1398);delay(100);

while(!kbhit){

goto d1; }


//1


menu1();break;

case 'd':       d2:

sound(1477);delay(100); sound(1479);delay(100);
sound(1481);delay(100);

while(!kbhit){

goto d2; }


//1


menu1();break;

case 'f':       d3:

sound(1569);delay(100); sound(1571);delay(100);
sound(1573);delay(100);

while(!kbhit){

goto d3; }


//1


menu1();break;

case 'g':       d4:
```

```
sound(1659);delay(100); sound(1661);delay(100);
sound(1663);delay(100);

while(!kbhit){

goto d4; }


//1



menu1();break;

case 'h':       d5:

sound(1758);delay(100); sound(1760);delay(100);
sound(1762);delay(100);

while(!kbhit){

goto d5; }


//1


menu1();break;

case 'j':       d6:

sound(1862);delay(100); sound(1864);delay(100);
sound(1866);delay(100);

while(!kbhit){

goto d6; }


//1


menu1();
```

```
break;
case 'k':       d7:
sound(1973);delay(100); sound(1975);delay(100);
sound(1977);delay(100);
while(!kbhit){
goto d7; }

//1
menu1();
break;
case 'l':       d9:
sound(2091);delay(100); sound(2093);delay(100);
sound(2095);delay(100);
while(!kbhit){
goto d9; }

//1
menu1();

break;
case ';':       e1:
sound(2215);delay(100); sound(2217);delay(100);
sound(2219);delay(100);
while(!kbhit){
goto e1; }

//1
```

```
menu1();
break;
case '|':      e2:
sound(2347);delay(100); sound(2349);delay(100);
sound(2351);delay(100);
while(!kbhit){
goto e2; }

//1

menu1();
break;
case 'z':      e3:
sound(2487);delay(100); sound(2489);delay(100);
sound(2491);delay(100);
while(!kbhit){
goto e3; }

//1

menu1();
break;
case 'x':      e4:
sound(2635);delay(100); sound(3637);delay(100);
sound(2639);delay(100);
while(!kbhit){
```

```
goto e4; }


//1


menu1();
break;
case 'c':       e5:
sound(2791);delay(100); sound(2793);delay(100);
sound(2795);delay(100);
while(!kbhit){
goto e5; }


//1


menu1();
break;
case 'v':       e6:
sound(2957);delay(100); sound(2959);delay(100);
sound(2961);delay(100);
while(!kbhit){
goto e6; }


//1


menu1();
break;
case 'b':       e7:
```

```
sound(3133);delay(100); sound(3135);delay(100);
sound(3137);delay(100);

while(!kbhit){

goto e7; }


//1


menu1();

break;

case 'n':      e8:

sound(3320);delay(100); sound(3322);delay(100);
sound(3324);delay(100);

while(!kbhit){

goto e8; }


//1


menu1();

break;

case 'm':      e9:

sound(3520);delay(100); sound(3522);delay(100);
sound(3524);delay(100);

while(!kbhit){

goto e9; }


//1
```

```
menu1();break;

case ',':       f1:

sound(3518);delay(100); sound(3520);delay(100);
sound(3522);delay(100);

while(!kbhit){

goto f1; }


//1


menu1();

break;

case '.':       f2:

sound(3727);delay(100); sound(3729);delay(100);
sound(3431);delay(100);

while(!kbhit){

goto f2; }


//1


menu1();

break;

case '/':       f3:

sound(3949);delay(100); sound(3951);delay(100);
sound(3953);delay(100);

while(!kbhit){

goto f3; }
```

```
//1


menu1();
break;
case '}':       nosound(); menu();
}


getch();
}




void virus()
{char msg[80];
delay(1000);
cleardevice();
for(int i=0;i<=100;i++)
{textcolor(YELLOW+BLINK);
gotoxy(35,12);
setbkcolor(BLACK);
setcolor(YELLOW+BLINK);
outtextxy(170,100,"Please do not close this window now!\n");
outtextxy(170,150,"Else the window may get corrupt\n");
outtextxy(250,200,"VIRUS LOADING");
gotoxy(39,15);
```

```
setcolor(GREEN);
cout<<i<<"%";
delay(65);
cleardevice();
}
delay(100);
cleardevice();
gotoxy(20,12);
setcolor(GREEN+BLINK);
outtextxy(150,140," RANSOMEWARE CREATED BY PROCRAETORIAN");
gotoxy(20,14);
outtextxy(150,210," SAY GOOD BYE TO YOUR PC IN ");
setcolor(GREEN);
for(int j=5;j>=0;j--)
{
gotoxy(48,14);
cout<<j;
outtextxy(320,210," SECONDS");
delay(1000);
}
cleardevice();
settextstyle(SMALL_FONT,HORIZ_DIR,6);
setbkcolor(BLACK);
lowvideo();
outtextxy(10,10," 1.HARD-DISK CORRUPTION:");
delay(4000);
```

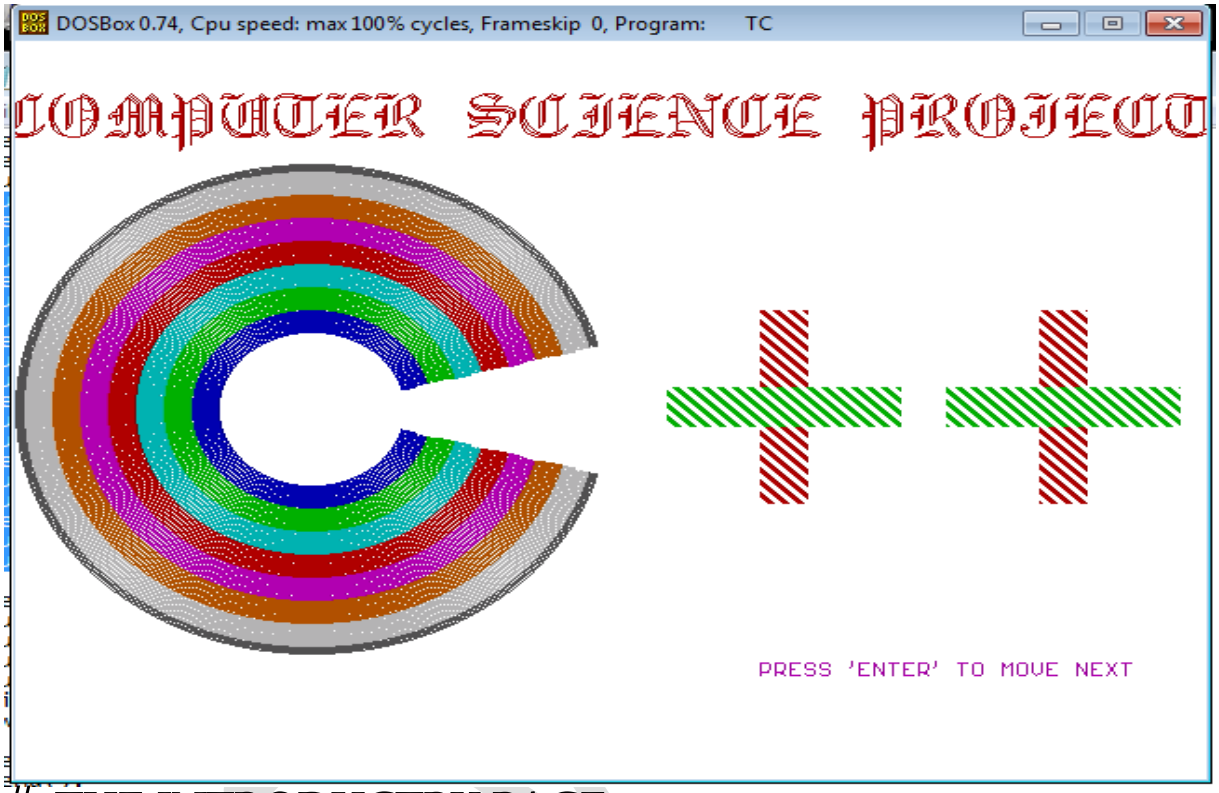
```
outtextxy(460,10,"completed");
outtextxy(10,60," 2.MOTHER BOARD CORRUPTION:");
delay(4000);
outtextxy(460,60,"completed");
outtextxy(10,100," 3.INSTALLING CYBERBOB.DLL ~~
>WINDOWS/COMMAND:");
delay(4000);
outtextxy(460,100,"completed");
setcolor(YELLOW);
settextstyle(DEFAULT_FONT,HORIZ_DIR,2);
outtextxy(10,160," \nPROCRAETORIAN.SYS SUCCESSFULLY PLANTED");
delay(3000);


lol();
}
void lol()
{       cleardevice();
delay(1000);
setcolor(YELLOW);
settextstyle(TRIPLEX_FONT,0,1);
delay(1000);
setbkcolor(RED);
highvideo();
outtextxy(50,150,"THE RANSOME:");
delay(1500);
outtextxy(50,200,"YOUR PC IS NOW UNDER SURVEILANCE BY THE
VIRUSHOST");
```

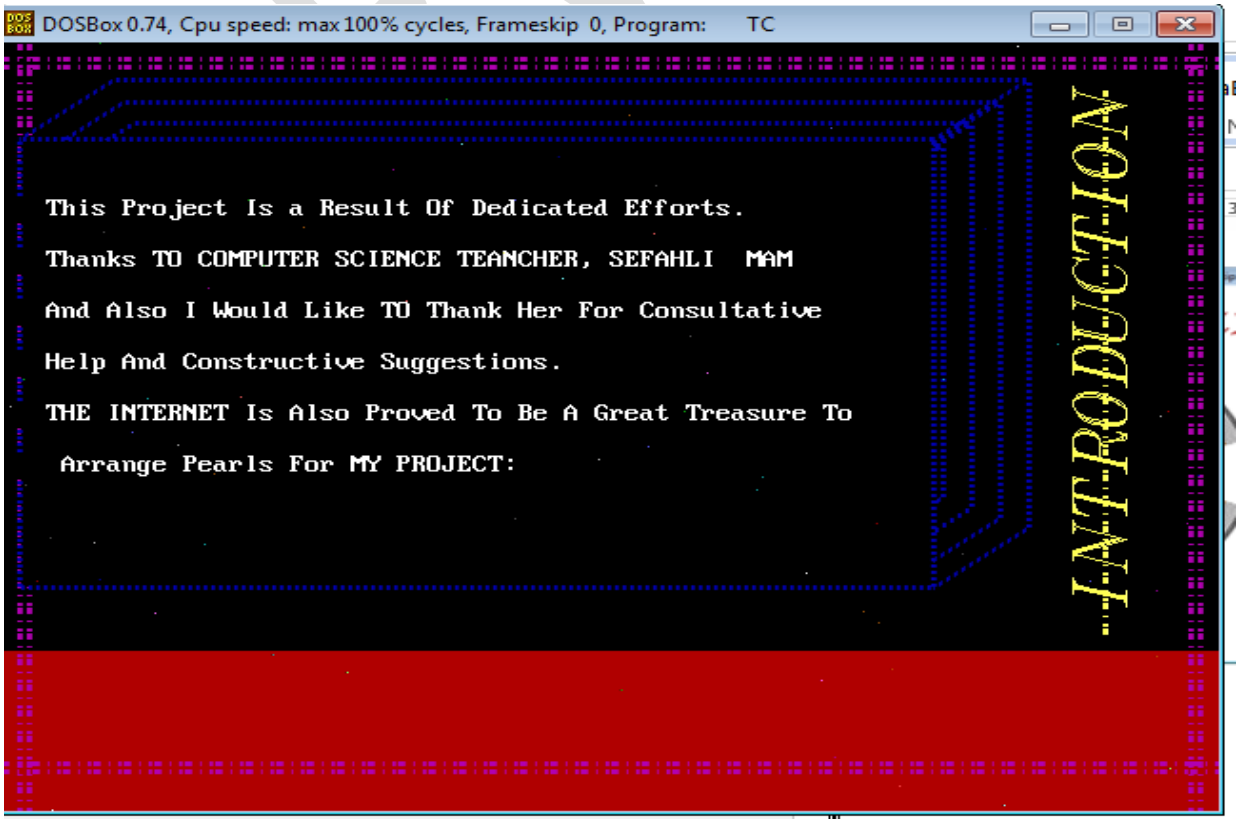
```
outtextxy(50,250,"PEA(C)E BE WITH YOU ! ! !");
 getch();
delay(500);
clrscr();
cleardevice();
setbkcolor(BLACK);
cout<<"\n **          * *  *     **      ";
cout<<"\n **        *      *     **      ";
cout<<"\n **       *        *    **      ";
cout<<"\n **       *        *    **      ";
cout<<"\n **        *      *     **      ";
cout<<"\n **         *    *      **      ";
cout<<"\n *** * * * *    * *       * * * * *";
cout<<"\n * * * * * *                * * * * *";
cout<<"     \n\t**********************\n";
cout<<"     Buddy it's a simply joke \n";
cout<<"     **********************\n";
delay(2000);
cout<<"**********************************\n";
cout<<"For Real Virus\n ";
cout<<"Contact: Himanshu and devesh";
cout<<"Mo: 010101010101\n ";
cout<<"Email: FUTUREPROGRAMMERS@12th_a.co.in \n";
cout<<"**********************************";
delay(3000);
}
```

OUTPUTS

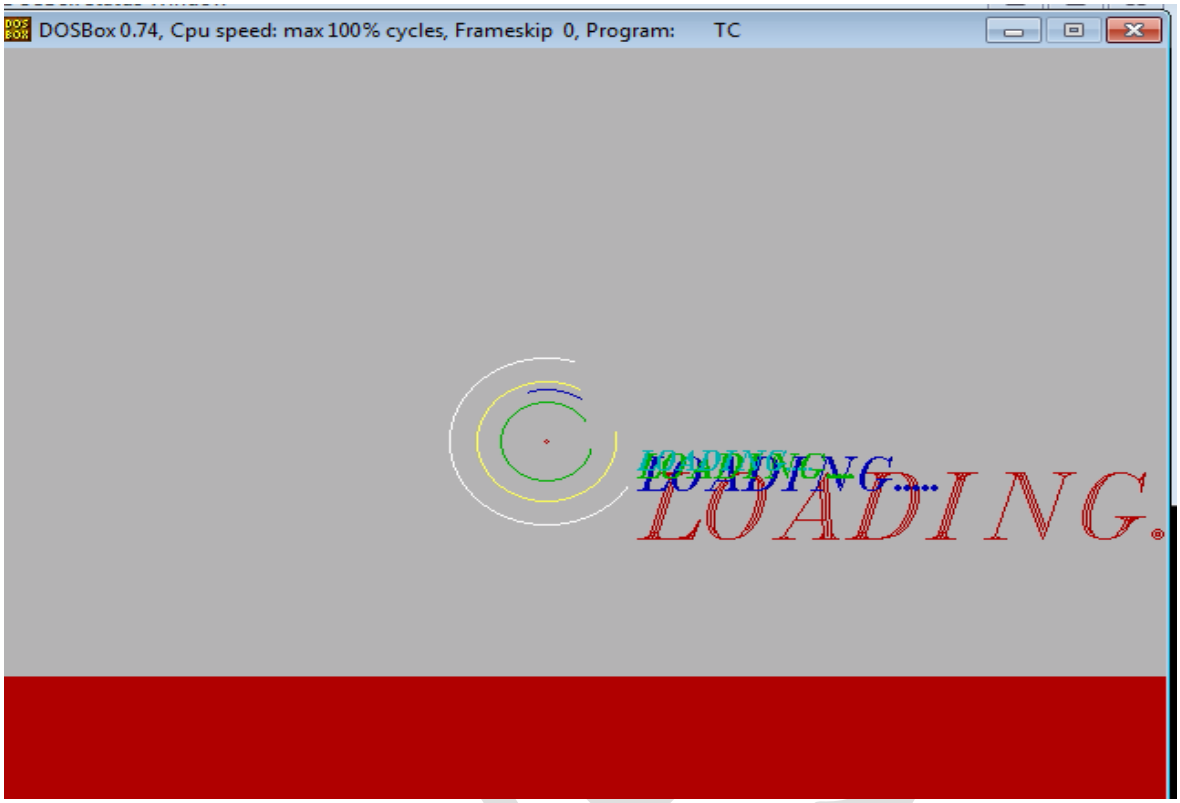
THE ENTRY PAGE



THE INTRODUCTRY PAGE

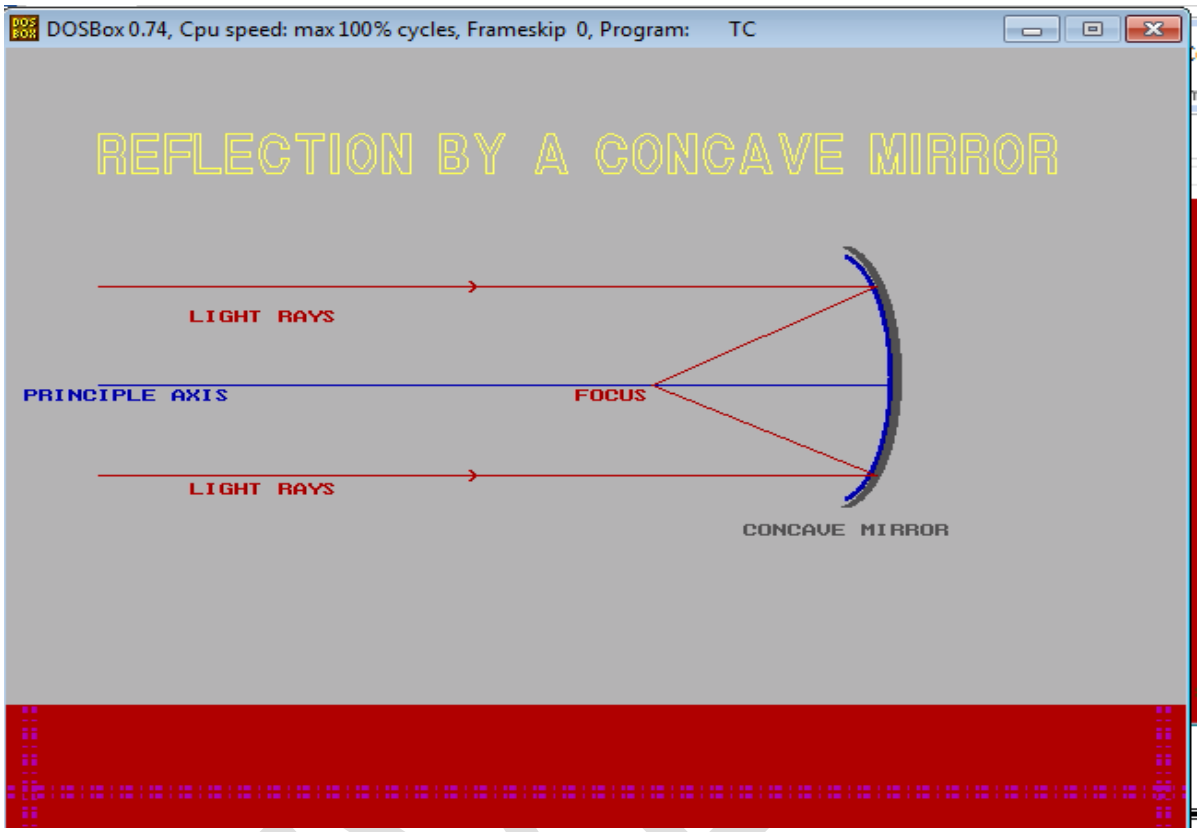


THE LOADING PAGE

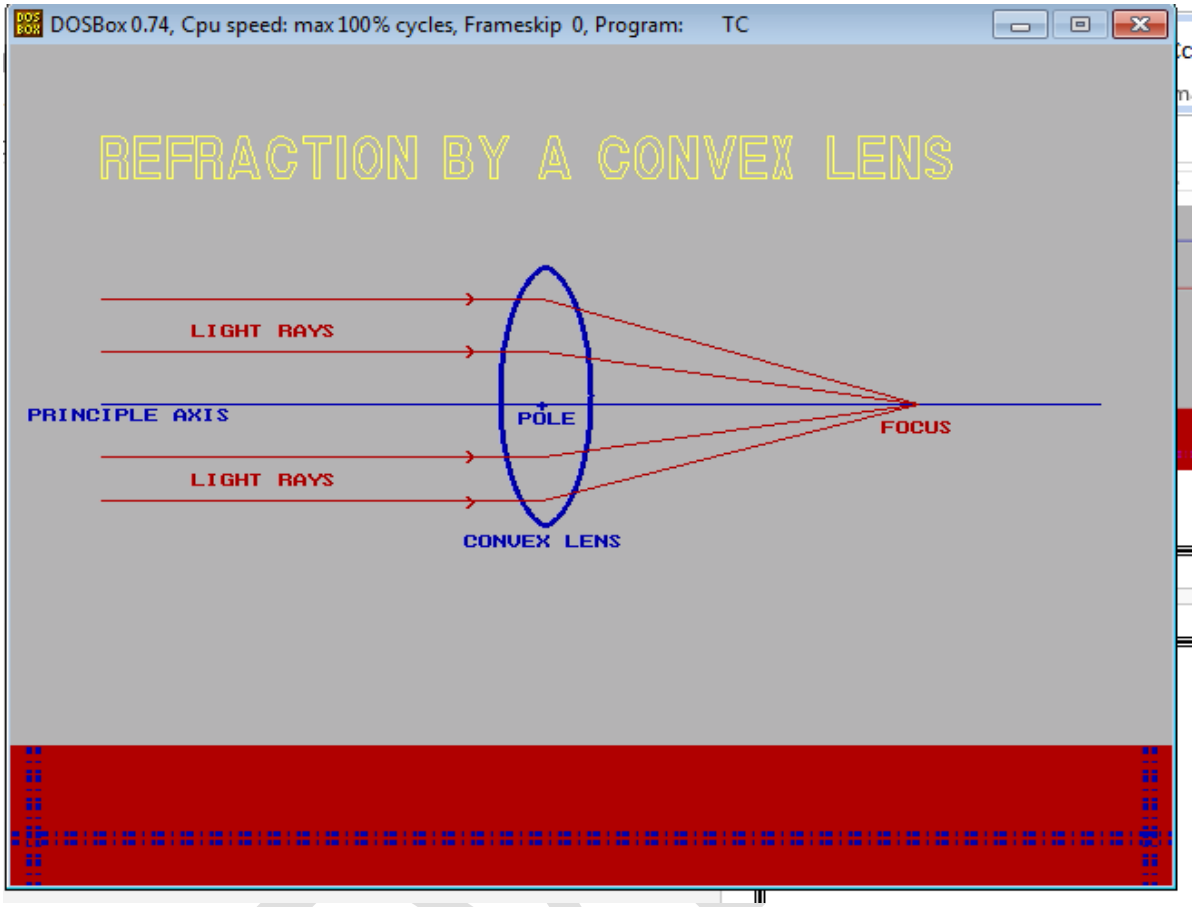


THE MENU PAGE

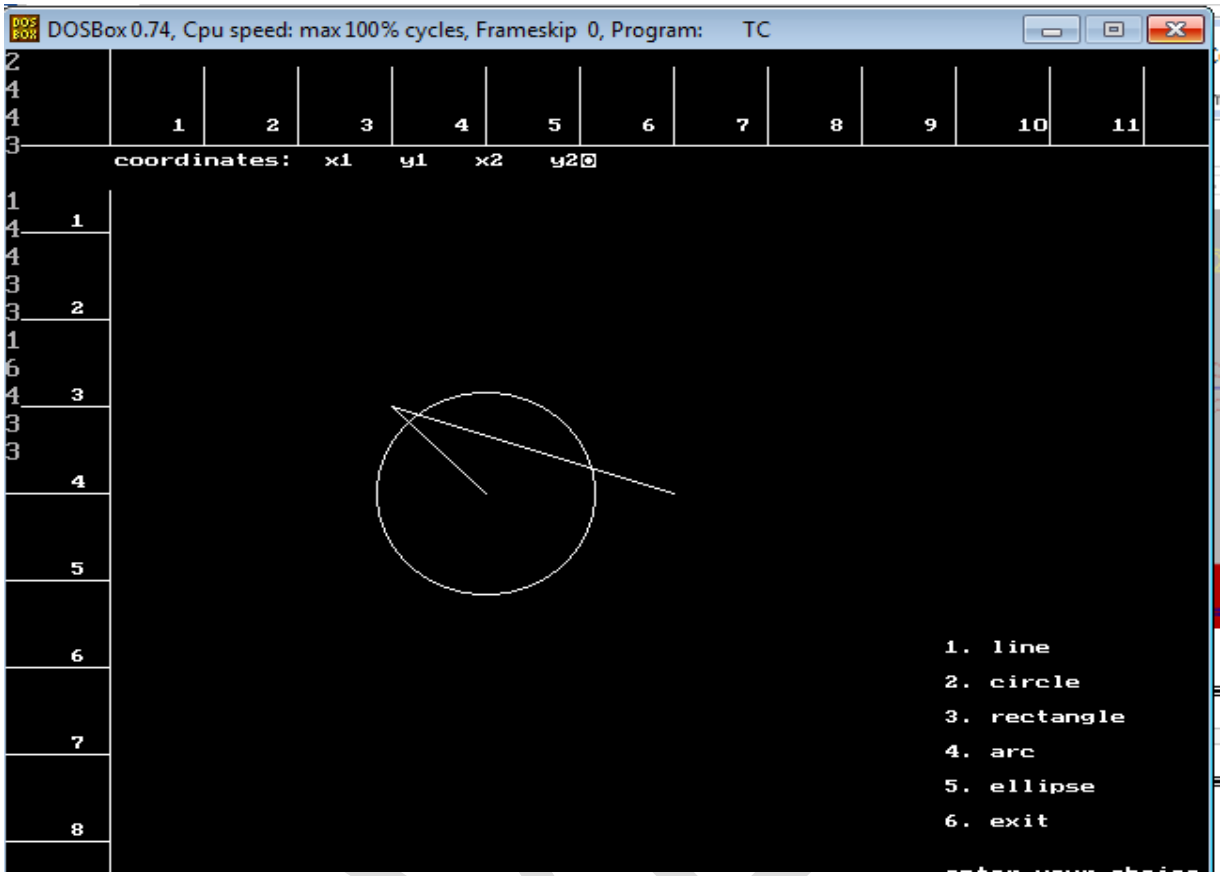
THE REFLECTION PART



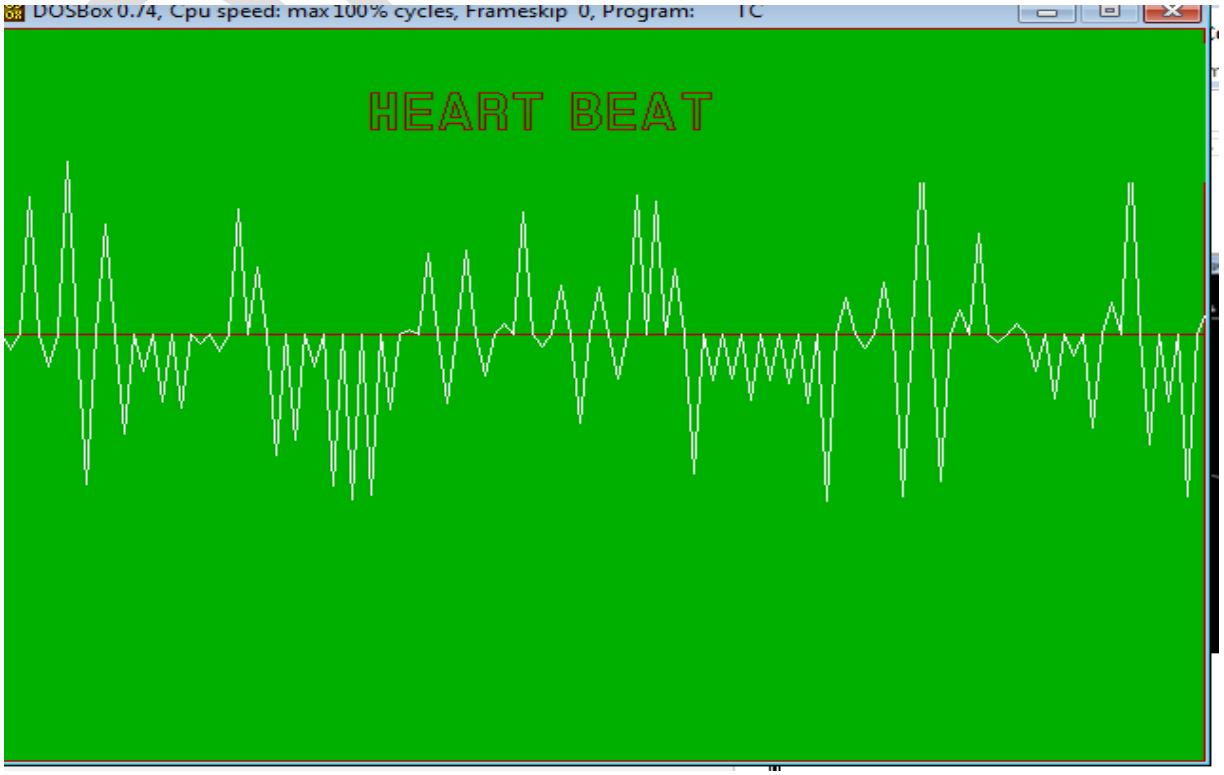
THE REFRACTION PART



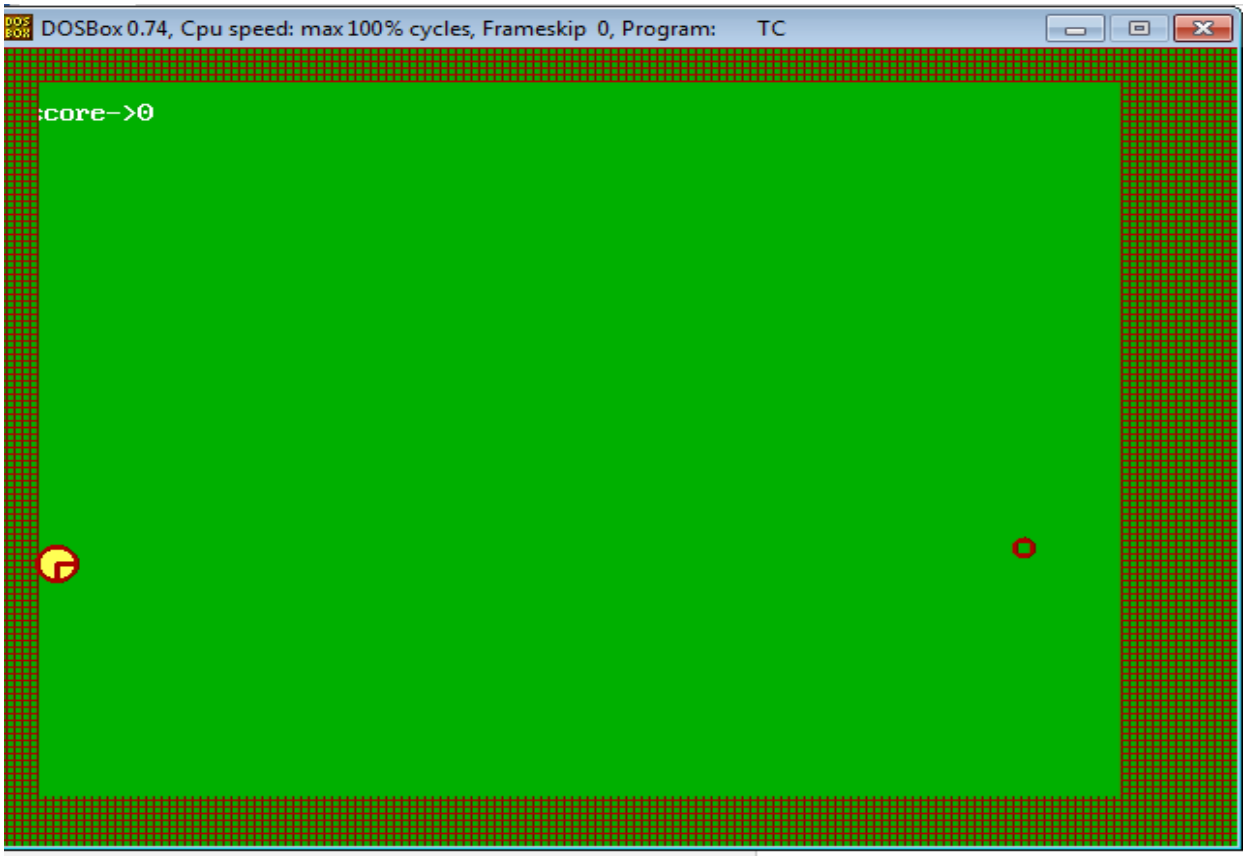
LETS DRAW



SEE YOUR BEATS

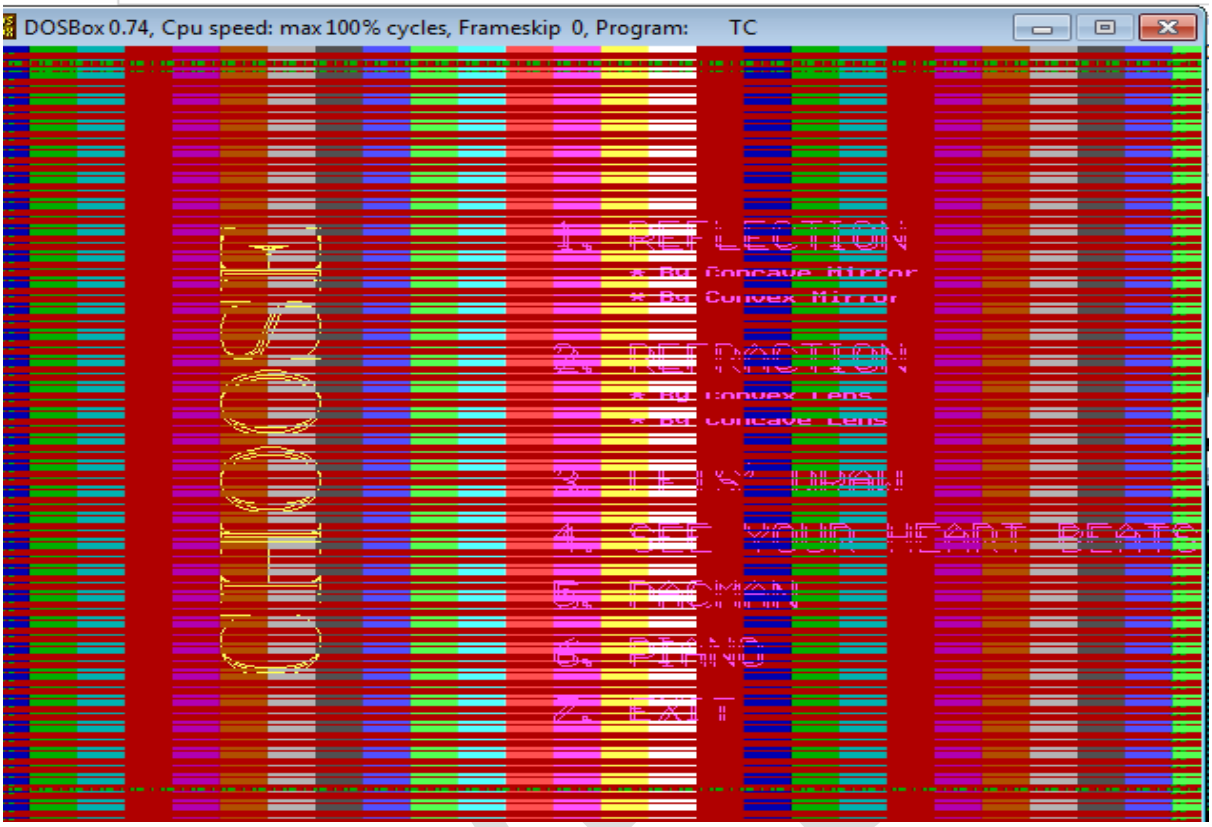


THE PACMAN MAN GAME (littlebit you can say)

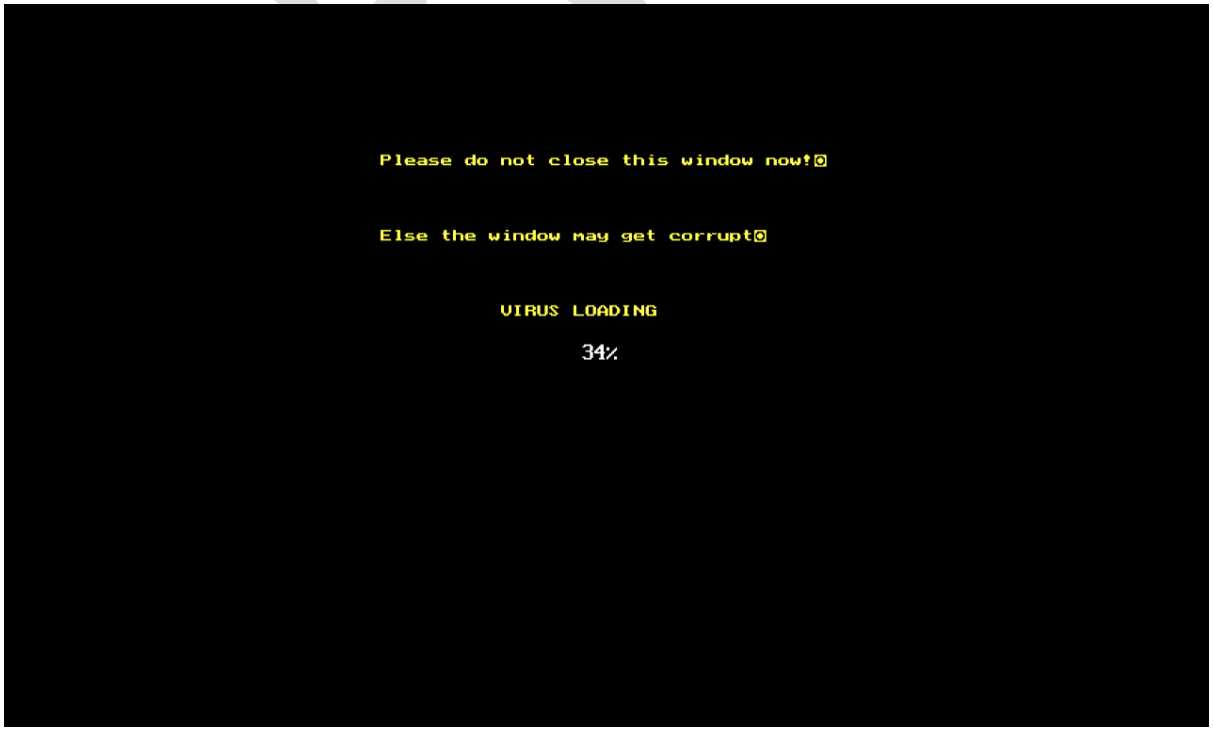


THE PIANO {for it you need speakers(has basic frequecies of piano)}

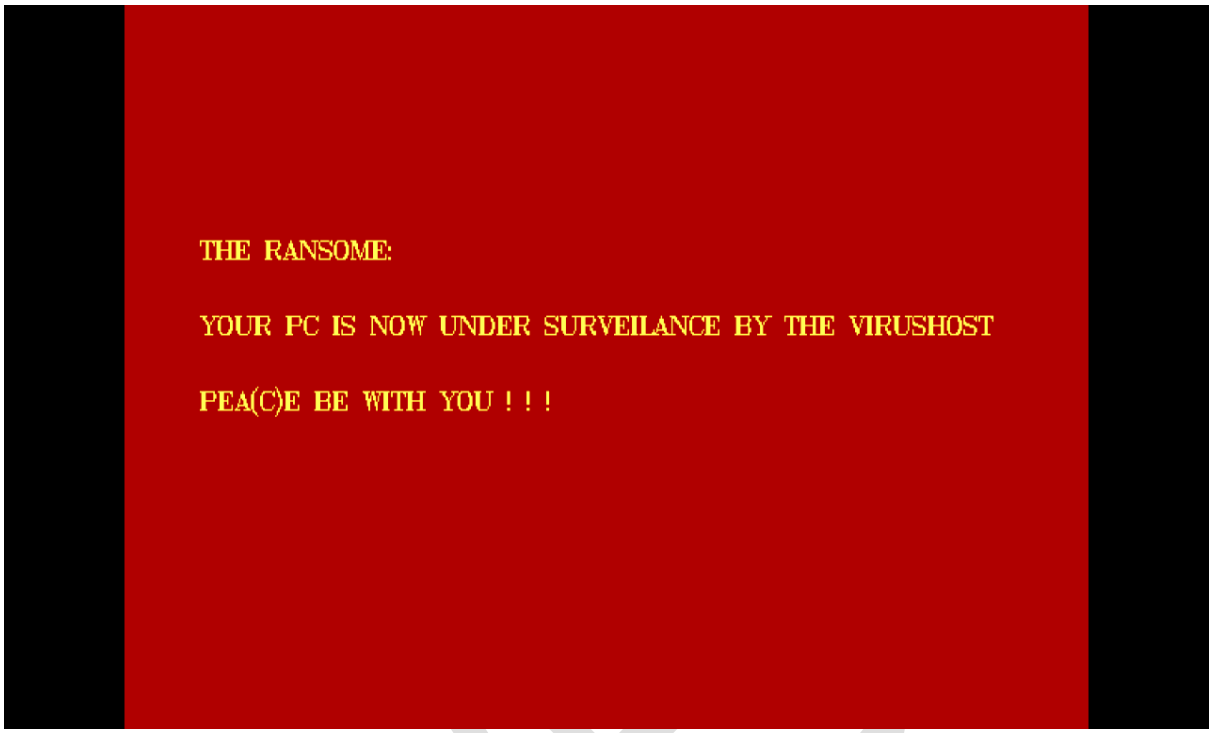
A MISTRY OR A SURPRISE(to the next)



Watch Out Your PC!



Ouch!



THE ENDING PAGE

LIMITATIONS

- THE PART LETS DRAW CAN MAKE ONLY 4-5 SHAPES AT A TIME.

- SINCE IT IS FIRST TIME TO TRY A HAND ON GRAPHICS SO, THERE IS SOME PROBLEM IN PACMAN CONTINOUSITY.
    - MOREOVER DUE TO SLOW PROCESSOR RESPONDING RATE , THE EXECUTION OF COMMANDS IN IT IS ALSO SLOW.

- PIANO IS ANOTHER PROGRAMME WHICH SOMETIMES HAULED DUE SLOW PROCESSOR RESPONDING.