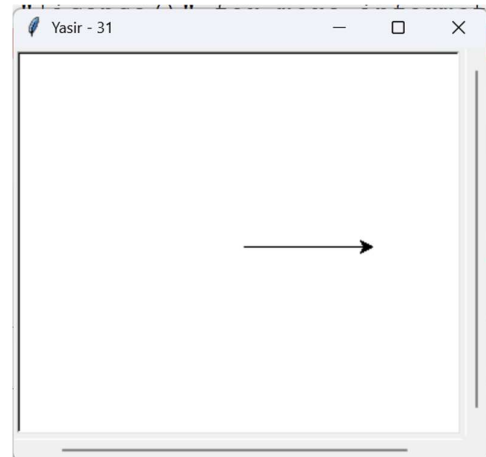


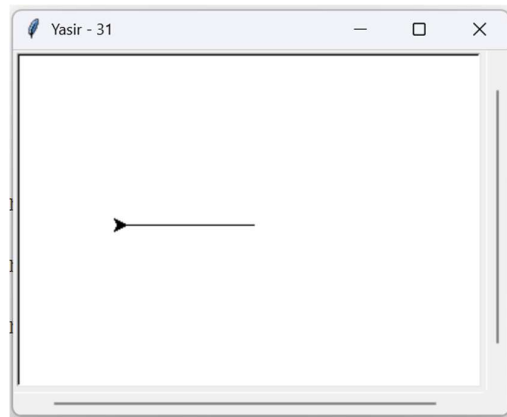
1a.

```
import turtle
turtle.title("Yasir - 31")
turtle.forward(100)
turtle.done()
```



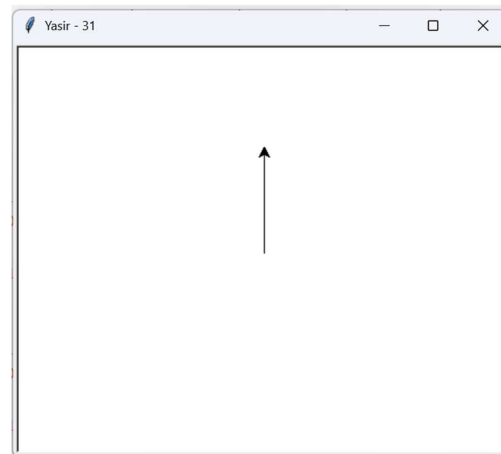
1b.

```
import turtle
turtle.title("Yasir - 31")
turtle.backward(100)
turtle.done()
```



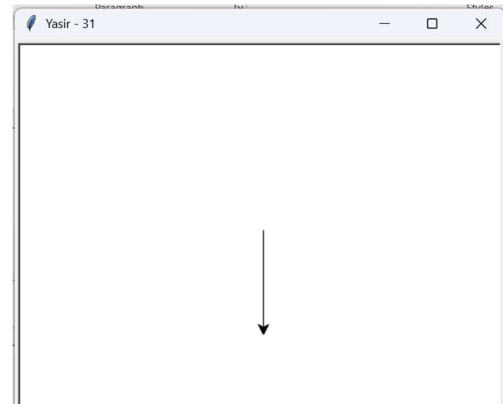
1c.

```
import turtle
turtle.title("Yasir - 31")
turtle.left(90)
turtle.forward(100)
turtle.done()
```



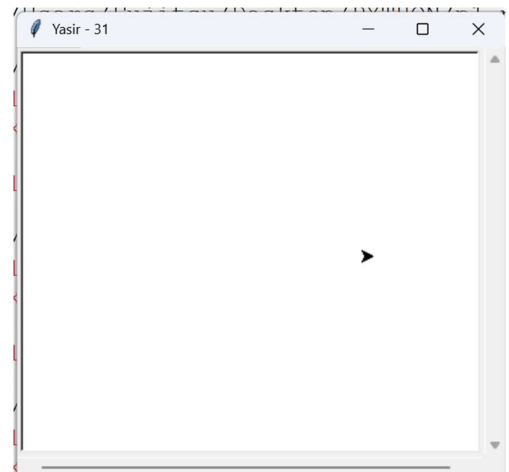
1d.

```
import turtle
turtle.title("Yasir - 31")
turtle.right(90)
turtle.forward(100)
turtle.done()
```



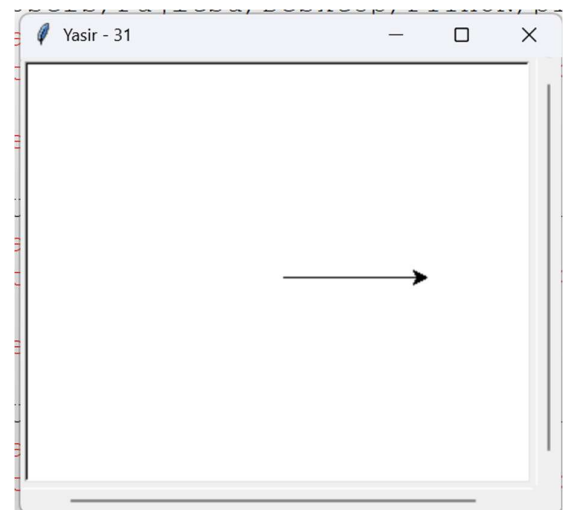
1e.

```
import turtle
turtle.title("Yasir - 31")
turtle.penup()
turtle.forward(100)
turtle.done()
```



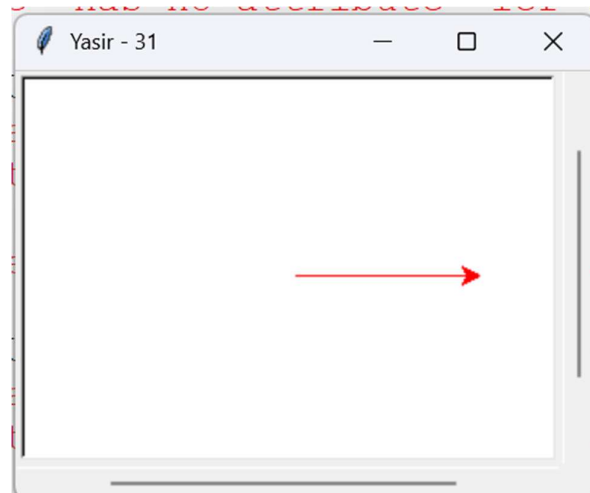
1f.

```
import turtle
turtle.title("Yasir - 31")
turtle.pendown()
turtle.forward(100)
turtle.done()
```



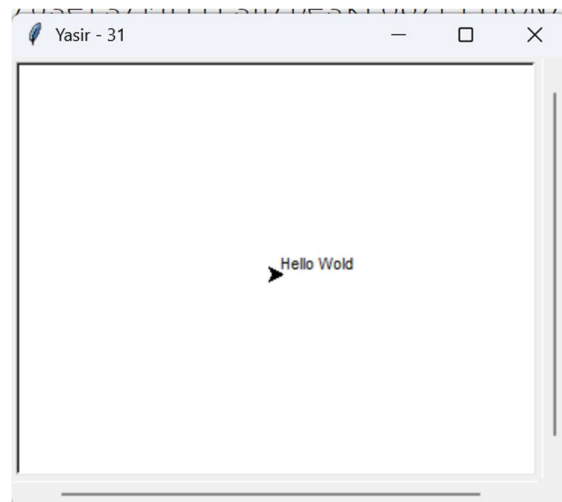
1g.

```
import turtle
turtle.title("Yasir - 31")
turtle.color("red")
turtle.forward(100)
turtle.done()
```



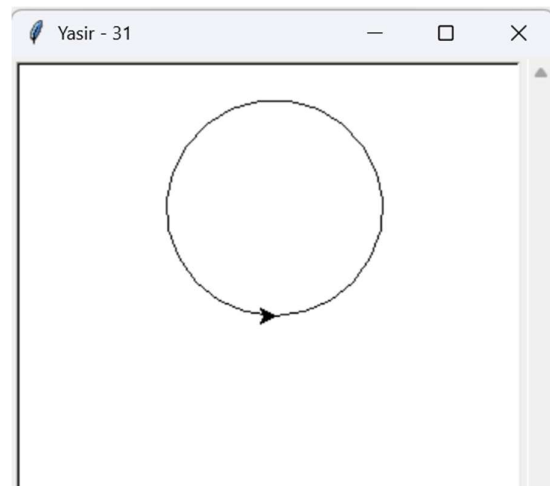
1h.

```
import turtle
turtle.title("Yasir - 31")
turtle.write("Hello Wold")
turtle.done()
```



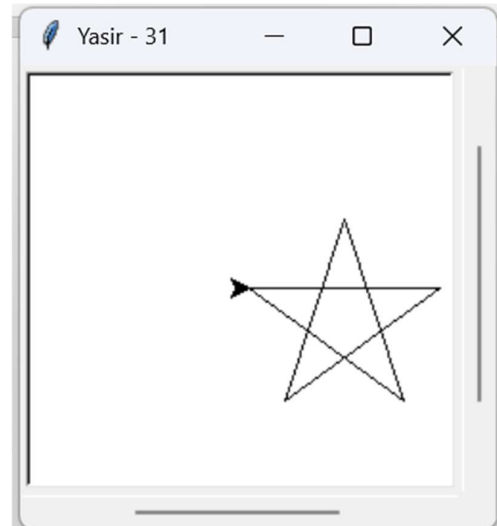
1i.

```
import turtle
turtle.title("Yasir - 31")
turtle.circle(70)
turtle.done()
```



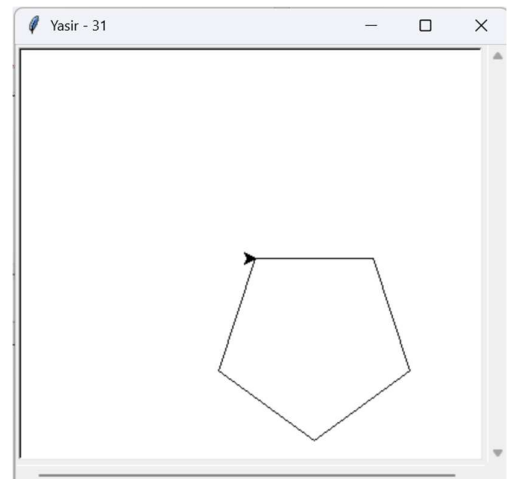
1j.

```
import turtle
turtle.title("Yasir - 31")
turtle.speed(1)
for _ in range(5):
    turtle.forward(100)
    turtle.right(144)
turtle.done()
```



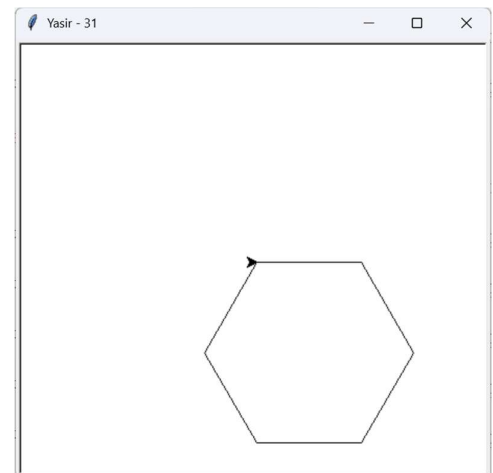
1k.

```
import turtle
turtle.title("Yasir - 31")
turtle.speed(1)
for _ in range(5):
    turtle.forward(100)
    turtle.right(72)
turtle.done()
```



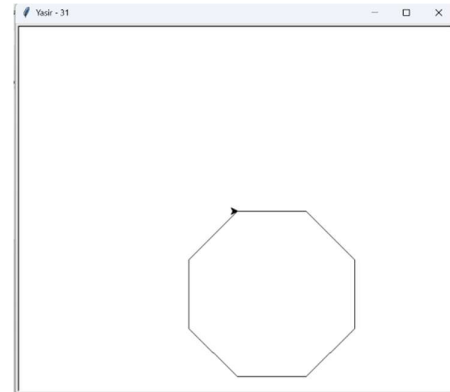
1l.

```
import turtle
turtle.title("Yasir - 31")
turtle.speed(1)
for _ in range(6):
    turtle.forward(100)
    turtle.right(60)
turtle.done()
```



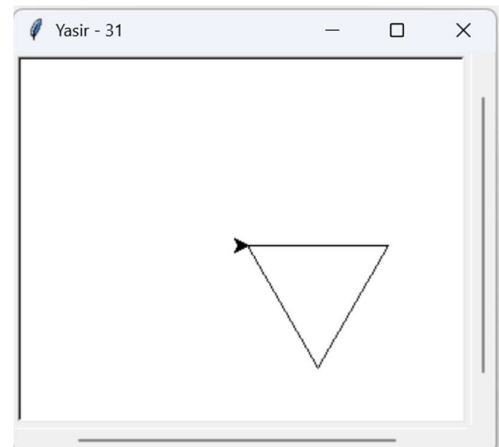
1m.

```
import turtle
turtle.title("Yasir - 31")
turtle.speed(1)
for _ in range(8):
    turtle.forward(100)
    turtle.right(45)
turtle.done()
```



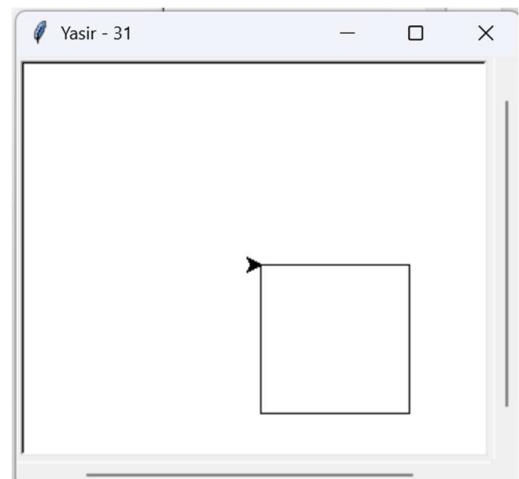
1n.

```
import turtle
turtle.title("Yasir - 31")
turtle.speed(1)
for _ in range(3):
    turtle.forward(100)
    turtle.right(120)
turtle.done()
```



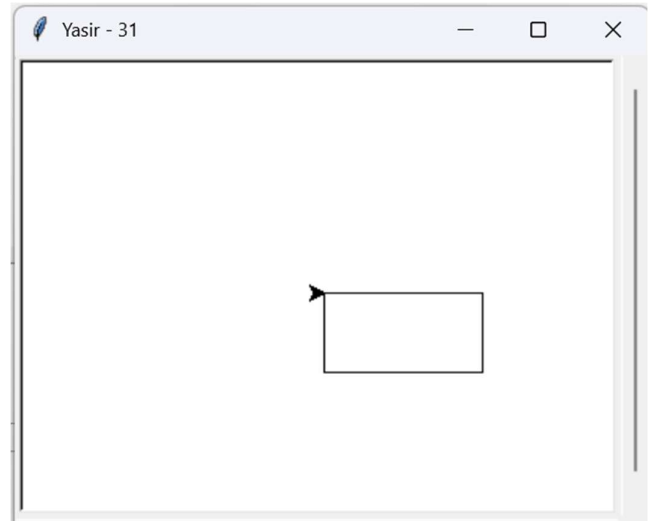
1o.

```
import turtle
turtle.title("Yasir - 31")
turtle.speed(1)
for _ in range(4):
    turtle.forward(100)
    turtle.right(90)
turtle.done()
```



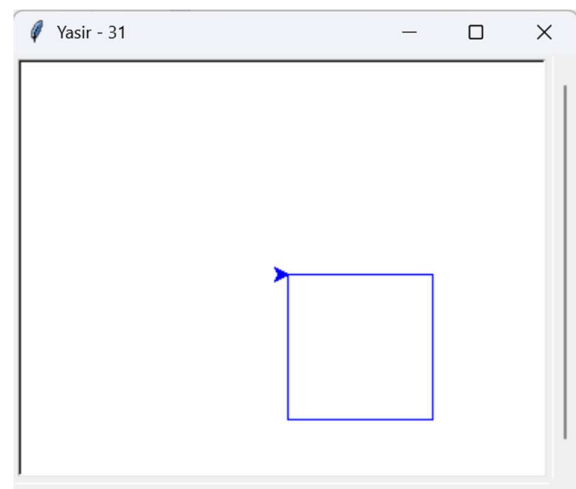
1p.

```
import turtle
turtle.title("Yasir - 31")
turtle.speed(1)
for _ in range(2):
    turtle.forward(100)
    turtle.right(90)
    turtle.forward(50)
    turtle.right(90)
turtle.done()
```



1q.

```
import turtle
turtle.title("Yasir - 31")
turtle.speed(1)
turtle.begin_fill()
turtle.color("Blue")
for _ in range(4):
    turtle.forward(100)
    turtle.right(90)
    turtle.end_fill()
turtle.done()
```



2b.

```

import turtle
turtle.title("Yasir - 31")
screen =turtle.Screen()
screen.setup(width=600, height=600)
pen=turtle.Turtle()
pen.speed (3)
pen.penup()
pen.goto (0,300)
pen.pendown ()
pen.setheading (270)
pen.forward (600)
pen.penup()
pen.goto(-300, 0 )
pen.pendown ()
pen.setheading (0)
pen. forward (600)
pen.penup()
pen.goto(-200, 100)
pen.pendown()
pen.circle (50)
pen.penup()
pen.goto(-200, 50)

pen.write("Circle", align="center",
font=("Arial", 12, "normal"))

pen.penup()
pen.goto(50, 100)
pen.pendown()
for _ in range(2):
    pen.forward (100)
    pen.right (90)
    pen.forward (50)
    pen.right (90)
pen.penup()

```

```

pen.goto(100, 50)

pen.write("Rectangle", align="center", font=("Arial",
12, "normal"))

pen.penup()

pen.goto(-200, -150)

pen.pendown()

pen.setheading (45)

pen.circle (100, 90)

pen.circle (50, 90) #Half circle Other half

pen.penup()

pen.goto(-200, -200)

pen.write("Ellipse", align="center", font=("Arial", 12,
"normal"))

pen.penup()

pen.goto (50, -150)

pen.pendown()

pen.setheading (0)

pen.circle (100, 180) #Half ellipse (semi-circle)

pen.penup()

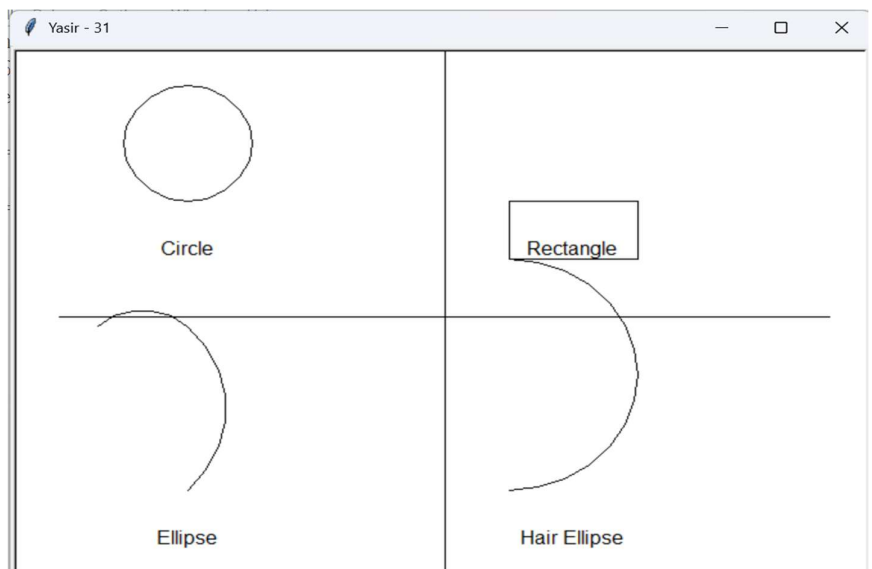
pen.goto(100, -200)

pen.write("Hair Ellipse", align="center", font=("Arial",
12, "normal"))

pen.hideturtle()

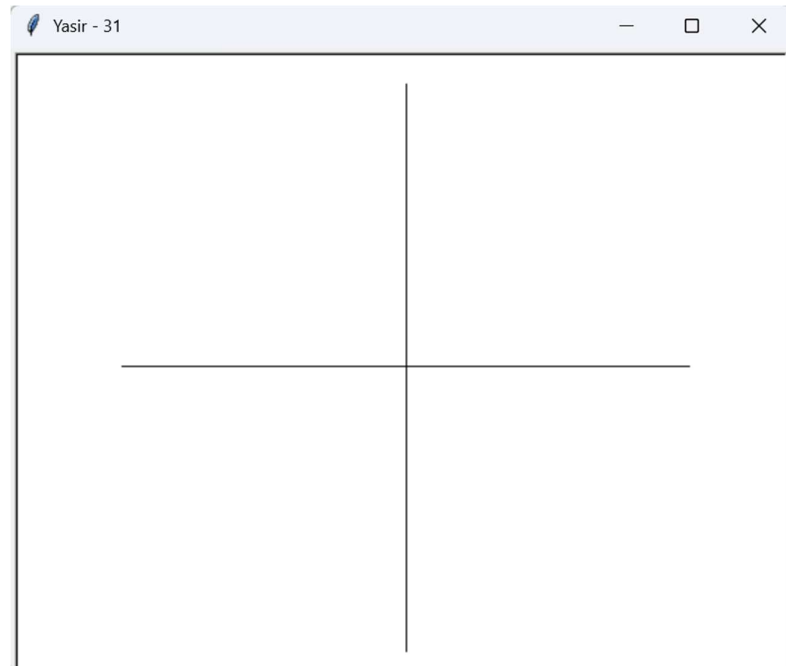
turtle.done()

```



1b.

```
import turtle
turtle.title("Faizan-06")
axis = turtle.Turtle()
axis.speed(0)
axis.hideturtle()
axis.penup()
axis.goto(-200, 0)
axis.pendown()
axis.goto(200, 0)
axis.penup()
axis.goto(0, -200)
axis.pendown()
axis.goto(0, 200)
turtle.done()
```



2B.

Practical 2b:

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

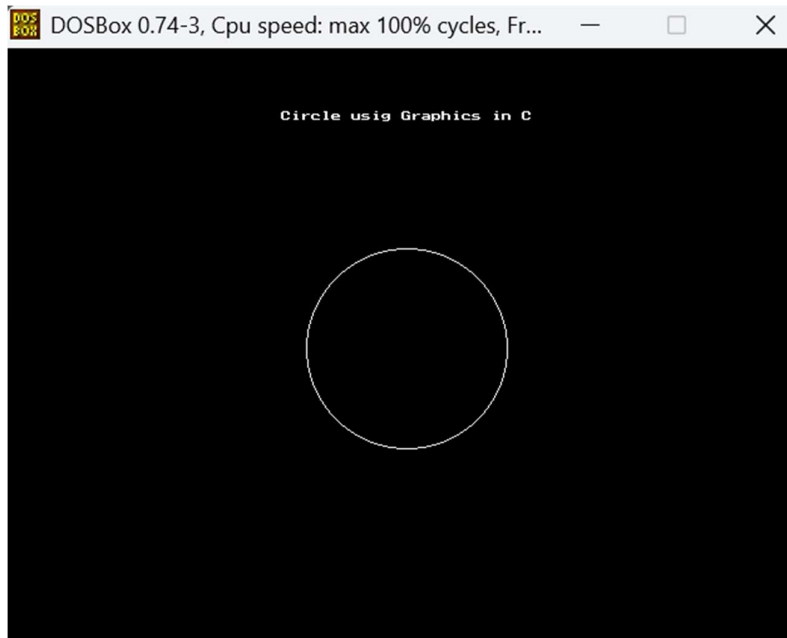
void main()
{
    int gd = DETECT, gm;
    initgraph(&gd, &gm, "C:\\\\Turboc3\\\\BGI"); ur setup
    setbkcolor(LIGHTBLUE);
    cleardevice();
    setcolor(WHITE);
    rectangle(150, 200, 350, 350);
    setfillstyle(SOLID_FILL, YELLOW);
    floodfill(151, 201, WHITE);
    line(150, 200, 250, 100); // Left side of the roof
    line(250, 100, 350, 200); // Right side of the roof

    setfillstyle(SOLID_FILL, RED);
    floodfill(200, 150, WHITE);
    rectangle(220, 280, 280, 350);
    setfillstyle(SOLID_FILL, BROWN);
    floodfill(221, 281, WHITE);
    rectangle(170, 230, 210, 270);
    rectangle(290, 230, 330, 270);
    getch();
    closegraph();
}
```



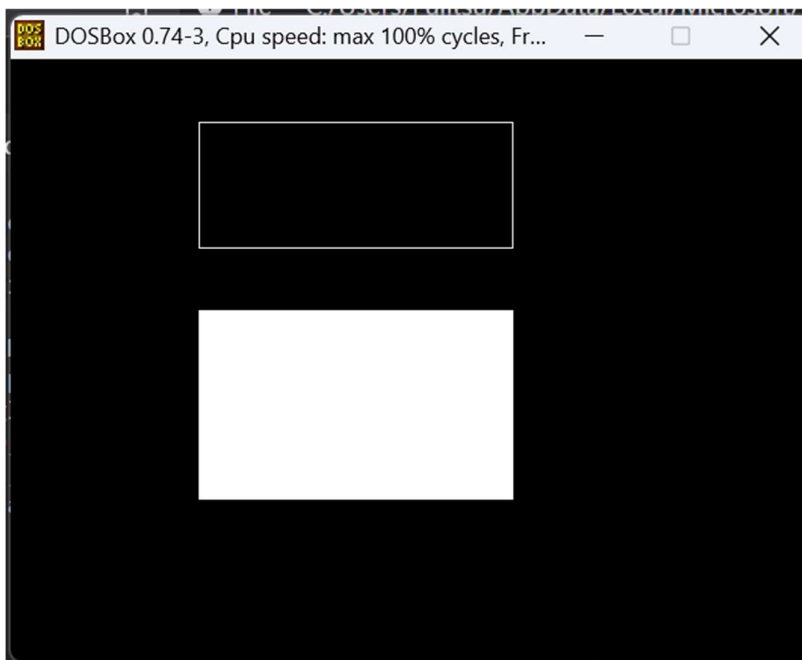
3A.

```
#include<graphics.h>
#include<conio.h>
void main()
{
    int gd=DETECT,gm;
    int x,y,radius=80;
    initgraph(&gd,&gm,"C:\\TURBOC3\\BGI");
    x=getmaxx()/2;
    y=getmaxy()/2;
    outtextxy(x-100,50,"Circle Using Graphics in C");
    circle(x,y,radius);
    getch();
    closegraph();
}
```



3B.

```
#include<graphics.h>
#include<conio.h>
void main()
{
    int gd=DETECT,gm;
    initgraph(&gd,&gm,"C:\\\\TURBOC3\\\\BGI");
    rectangle(150,50,400,150);
    bar(150,200,400,350);
    getch();
    closegraph();
}
```



3C.

```
#include<graphics.h>

#include<conio.h>

#include<stdio.h>

#include<math.h>

void main(){

int rc,rb,xc,yc,i;

float x,y;

int gd=DETECT,gm;

initgraph(&gd,&gm,"C:\\\\TURBOC3\\\\BGI");

printf("enter the radius of the outer circle\\n");

scanf("%d",&rc);

printf("enter the radius of the inner circle\\n");

scanf("%d",&rb);

printf("enter the center of the circle\\n");

scanf("%d",&xc);

scanf("%d",&yc);

for(i=1;i<=360;i++){

x=xc+(rb*(cos (i)));

y=yc+(rb*(sin (i)));

putpixel(x,y,7);

}

for(i=1;i<=360;i++)

{

x=xc+(rc*(cos(i)));

y=yc+(rc*(sin(i)));

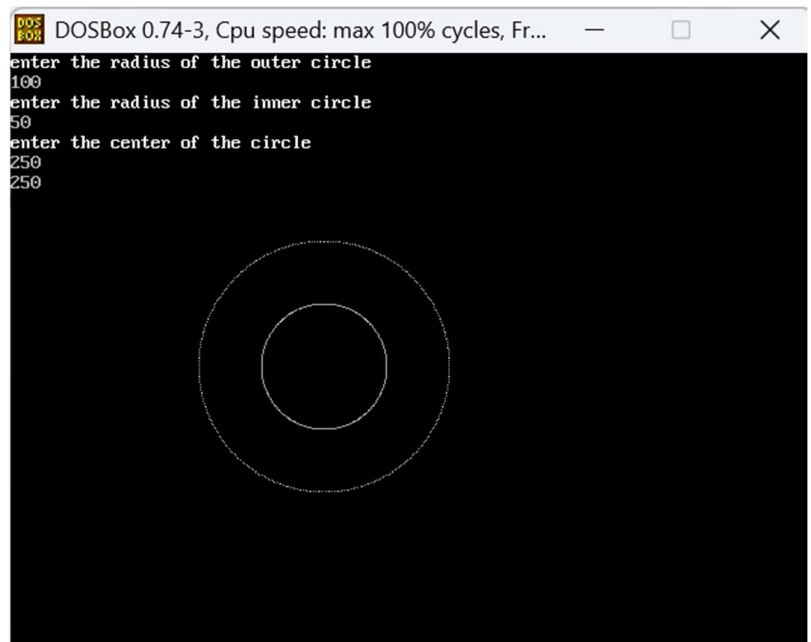
putpixel(x,y,7);

}

getch();

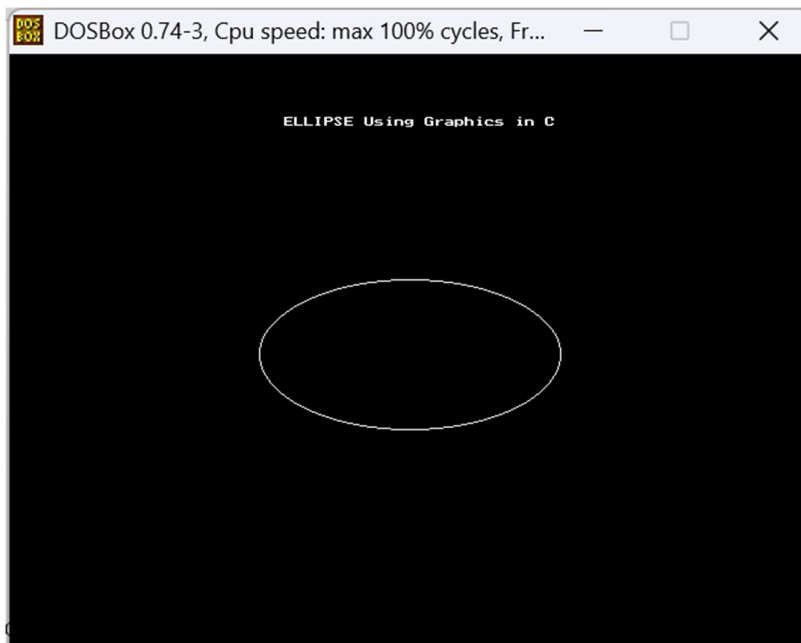
closegraph();

}
```



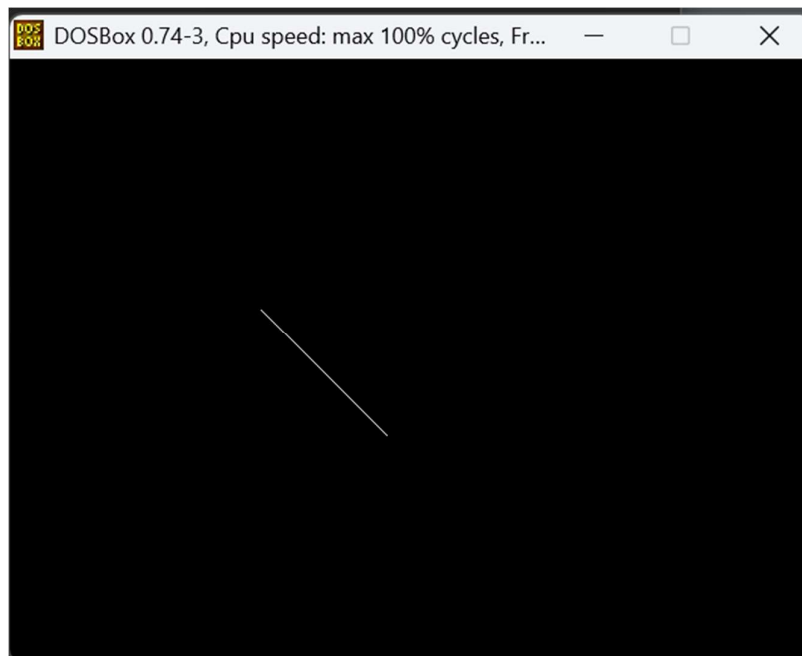
3D.

```
#include<graphics.h>
#include<conio.h>
void main()
{
int gd=DETECT,gm;
int x,y;
initgraph(&gd,&gm,"C:\\\\TURBOC3\\\\BGI");
x=getmaxx()/2;
y=getmaxy()/2;
outtextxy(x-100,50,"ELLIPSE Using Graphics in C");
ellipse(x,y,0,360,120,60);
getch();
closegraph();
}
```



3E.

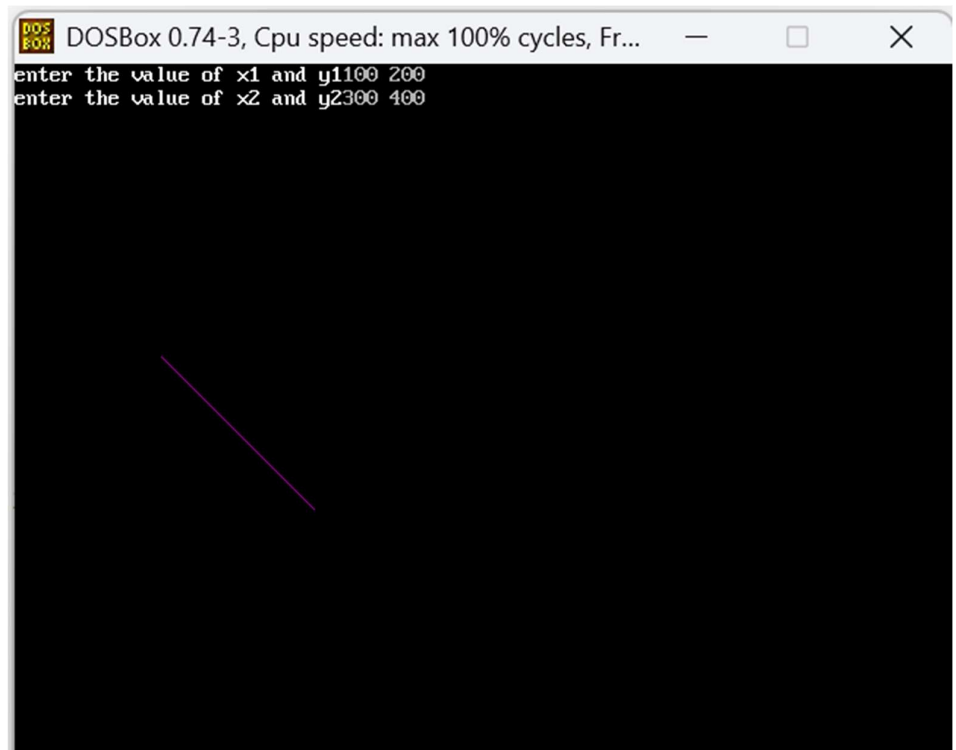
```
#include<graphics.h>
#include<stdio.h>
#include<conio.h>
void main()
{
int gd=DETECT,gm;
int x1=200,y1=200;
int x2=300,y2=300;
initgraph(&gd,&gm,"C:\\TURBOC3\\BGI");
line(x1,y1,x2,y2);
getch();
closegraph();
}
```



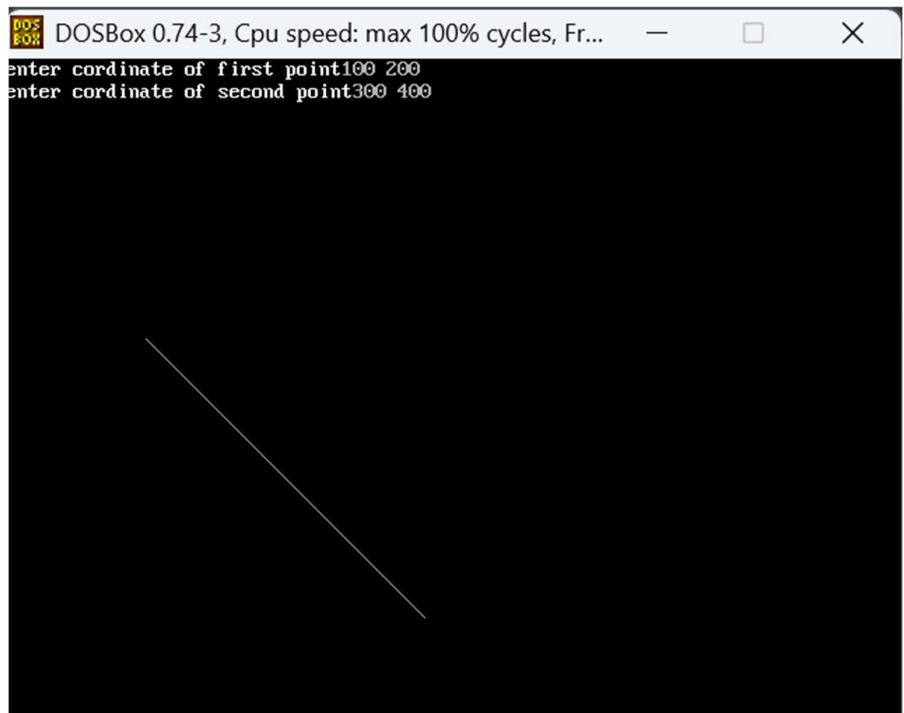
4A.

```
#include<graphics.h>
#include<stdio.h>
#include<conio.h>
#include<math.h>
#include<dos.h>

void main(){
float x,y,x1,y1,x2,y2,dx,dy,step;
int i,gd=DETECT,gm;
initgraph(&gd,&gm,"C:\\\\TURBOC3\\\\BGI");
printf("enter the value of x1 and y1");
scanf("%f%f",&x1,&y1);
printf("enter the value of x2 and y2");
scanf("%f%f",&x2,&y2);
dx=abs(x2-x1); dy=abs(y2-y1);
if(dx>=dy)
step=dx;
else
step=dy;
dx=dx/step; dy=dy/step;
x=x1; y=y1; i=1;
while(i<=step){
putpixel(x,y,5);
x=x+dx; y=y+dy; i=i+1;
delay(100);
}
closegraph();
getch();
}
```



4B.

`#include<stdio.h>``#include<conio.h>``#include<graphics.h>``void drawline(int x0,int y0,int x1,int y1)``{``int dx,dy,p,x,y;``dx=x1-x0; dy=y1-y0; x=x0; y=y0; p=2*dy-dx;``while(x<x1){``if(p>=0){``putpixel(x,y,7);``y=y+1; p=p+2*dy-2*dx;``}``else{``putpixel(x,y,7);``p=p+2*dy;``}``x=x+1;``}``}``void main(){``int gd=DETECT,gm,error,x0,y0,x1,y1;``initgraph(&gd,&gm,"C:\\TURBOC3\\BGI");``printf("enter coordinate of first point");``scanf("%d%d",&x0,&y0);``printf("enter coordinate of second point");``scanf("%d%d",&x1,&y1);``drawline(x0,y0,x1,y1);``getch();``closegraph();``}`

5A.

```

#include<stdio.h>
#include<conio.h>
#include<graphics.h>
#include<dos.h>
void drawcircle(int x0,int y0,int radius)
{
int x=radius;
int y=0;
int err=0;
while(x>=y)
{
putpixel(x0+x,y0+y,7);
putpixel(x0+y,y0+x,7);
putpixel(x0-y,y0+x,7);
putpixel(x0-x,y0+y,7);
putpixel(x0-x,y0-y,7);
putpixel(x0-y,y0-x,7);
putpixel(x0+y,y0-x,7);
putpixel(x0+x,y0-y,7);

```

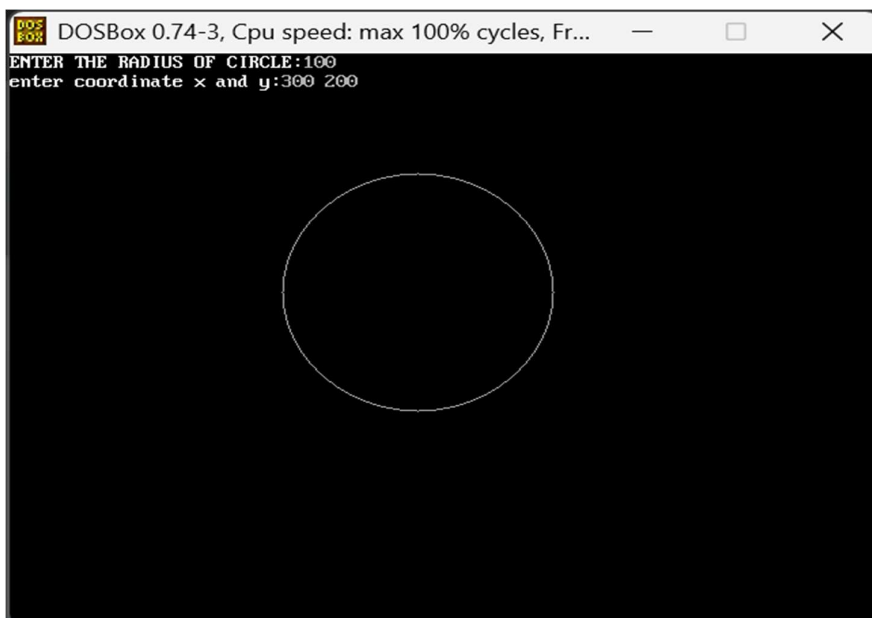
```

if(err<=0){
y+=1; err+=2*y+1;
}
if(err>=0){
x-=1;
err-=2*x+1;
}
}
}

void main(){
int gd=DETECT,gm,error,x,y,r;
initgraph(&gd,&gm,"C:\\TURBOC3\\BGI");
printf("ENTER THE RADIUS OF CIRCLE:");
scanf("%d",&r);

printf("enter coordinate x and y:");
scanf("%d%d",&x,&y);
drawcircle(x,y,r);
getch();
closegraph();
}

```



6A.

```
#include <graphics.h>

#include <stdio.h>

#include <stdlib.h>

void main()
{
    int graphdriver = DETECT, graphmode;

    int x1, y1, x2, y2;

    int tx, ty;

    int x3, y3, x4, y4;

    printf("Enter the coordinates of the line (x1, y1, x2, y2): \n");

    scanf("%d%d%d%d", &x1, &y1, &x2, &y2);

    initgraph(&graphdriver, &graphmode, "C:\\\\Turboc3\\\\BGI");

    line(x1, y1, x2, y2);

    printf("Enter the translation factors (tx, ty): \n");

    scanf("%d%d", &tx, &ty);

    x3 = x1 + tx;

    y3 = y1 + ty;

    x4 = x2 + tx;

    y4 = y2 + ty;

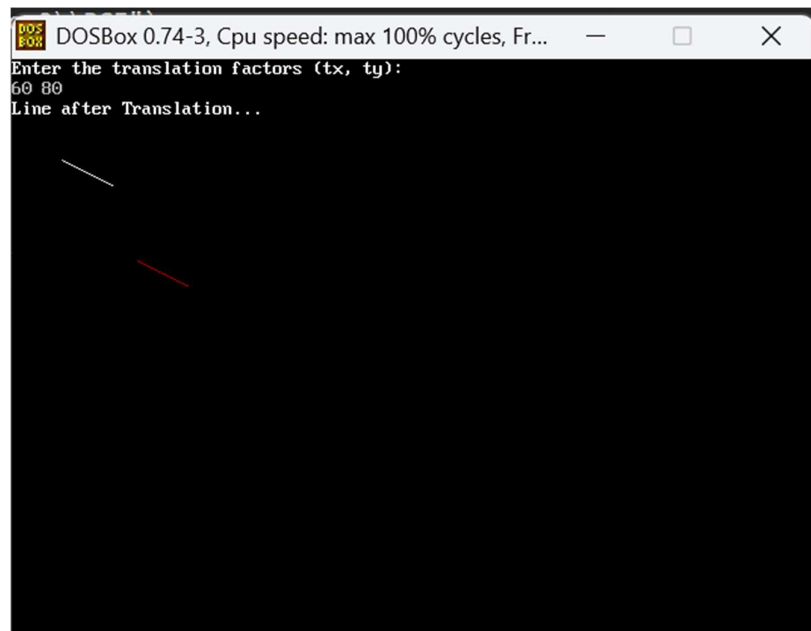
    printf("Line after Translation...\n");

    setcolor(RED);

    line(x3, y3, x4, y4);

    getch();

    closegraph();
}
```

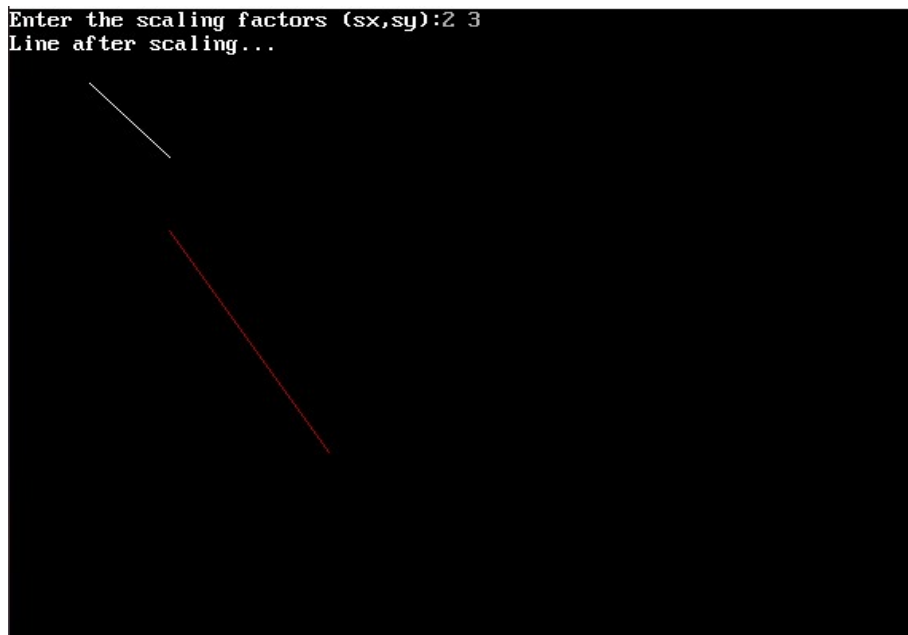


6B.

Practical 6b:

Code:

```
#include <graphics.h>
#include <stdio.h>
#include <stdlib.h>
void main()
{
    int graphdriver = DETECT, graphmode;
    int x1, y1, x2, y2;
    float sx, sy;
    int x3, y3, x4, y4;
    printf("Enter the coordinates of the line (x1, y1, x2, y2): ");
    scanf("%d%d%d%d", &x1, &y1, &x2, &y2);
    initgraph(&graphdriver, &graphmode, "C:\\\\TURBOC3\\\\BGI");
    line(x1, y1, x2, y2);
    printf("Enter the scaling factors (sx, sy): ");
    scanf("%f%f", &sx, &sy);
    x3 = x1 * sx;
    y3 = y1 * sy;
    x4 = x2 * sx;
    y4 = y2 * sy;
    printf("Line after scaling...\n");
    setcolor(RED);
    line(x3, y3, x4, y4);
    getch();
    closegraph();
}
```



```
Enter the scaling factors (sx,sy):2 3
Line after scaling...
```

7A.

```
#include <stdlib.h>
#include <stdio.h>
#include <conio.h>
void main(){
    int graphdriver = DETECT, graphmode;
    int x1, y1, x2, y2, x3, y3;
    int xn1, yn1, xn2, yn2, xn3, yn3;
    int choice;
    int midX, midY;
    printf("Enter the coordinates of the triangle (x1, y1, x2, y2, x3, y3): ");
    scanf("%d%d%d%d%d%d", &x1, &y1, &x2, &y2, &x3, &y3);
    initgraph(&graphdriver, &graphmode, "C:\\TURBOC3\\BGI");
    midX = getmaxx() / 2;
    midY = getmaxy() / 2;
    line(x1, y1, x2, y2);
    line(x2, y2, x3, y3);
    line(x3, y3, x1, y1);
    printf("\nChoose the type of reflection:\n");
    printf("1. Reflection over X-axis\n");
    printf("2. Reflection over Y-axis\n");
    printf("3. Reflection over Origin\n");
    printf("Enter your choice: ");
    scanf("%d", &choice);
    switch (choice)
    {case 1:
        xn1 = x1;
        yn1 = 2 * midY - y1;
        xn2 = x2;
        yn2 = 2 * midY - y2;
```

```
    xn3 = x3;
    yn3 = 2 * midY - y3;
    break;
case 2:
    xn1 = 2 * midX - x1;
    yn1 = y1;
    xn2 = 2 * midX - x2;
    yn2 = y2;
    xn3 = 2 * midX - x3;
    yn3 = y3;
    break;
case 3:
    xn1 = 2 * midX - x1;
    yn1 = 2 * midY - y1;
    xn2 = 2 * midX - x2;
    yn2 = 2 * midY - y2;
    xn3 = 2 * midX - x3;
    yn3 = 2 * midY - y3;
    break;
default:
    printf("Invalid choice\n");
    closegraph();
    exit(0);
}
setcolor(RED);
line(xn1, yn1, xn2, yn2);
line(xn2, yn2, xn3, yn3);
line(xn3, yn3, xn1, yn1);
getch();
closegraph();
}
```

Enter the angle of rotation (in degrees):45



7B.

```
#include <graphics.h>
#include <stdlib.h>
#include <stdio.h>
#include <conio.h>

void main(){
    int graphdriver = DETECT, graphmode;
    int x1, y1, x2, y2, x3, y3;
    int xn1, yn1, xn2, yn2, xn3, yn3;
    int choice;
    int midX, midY;

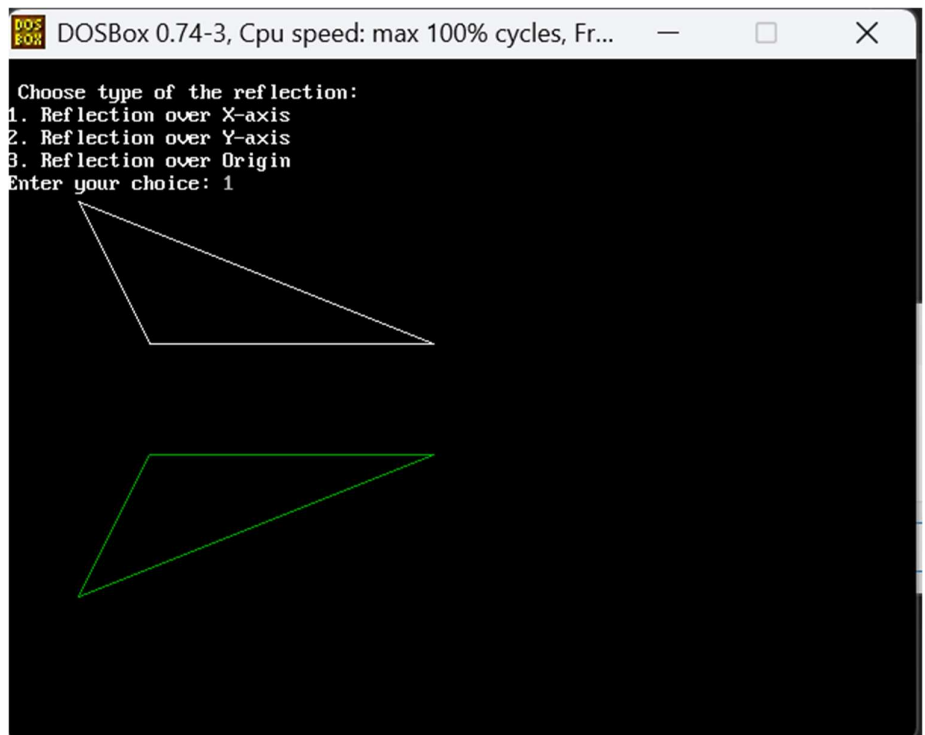
    printf("Enter the coordinates of the triangle (x1, y1, x2, y2, x3, y3): ");
    scanf("%d%d%d%d%d%d", &x1, &y1, &x2, &y2, &x3, &y3);
    initgraph(&graphdriver, &graphmode, "C:\\TURBOC3\\BGI");
    midX = getmaxx() / 2;
    midY = getmaxy() / 2;
    line(x1, y1, x2, y2);
    line(x2, y2, x3, y3);
    line(x3, y3, x1, y1);

    printf("\nChoose the type of reflection:\n");
    printf("1. Reflection over X-axis\n");
    printf("2. Reflection over Y-axis\n");
    printf("3. Reflection over Origin\n");
    printf("Enter your choice: ");
    scanf("%d", &choice);
    switch (choice)
    {case 1:
        xn1 = x1;
        yn1 = 2 * midY - y1;
        xn2 = x2;
        yn2 = 2 * midY - y2;
```

```

xn3 = x3;
yn3 = 2 * midY - y3;
break;
case 2:
xn1 = 2 * midX - x1;
yn1 = y1;
xn2 = 2 * midX - x2;
yn2 = y2;
xn3 = 2 * midX - x3;
yn3 = y3;
break;
case 3:
xn1 = 2 * midX - x1;
yn1 = 2 * midY - y1;
xn2 = 2 * midX - x2;
yn2 = 2 * midY - y2;
xn3 = 2 * midX - x3;
yn3 = 2 * midY - y3;
break;
default:
printf("Invalid choice\n");
closegraph();
exit(0);
}
setcolor(RED);
line(xn1, yn1, xn2, yn2);
line(xn2, yn2, xn3, yn3);
line(xn3, yn3, xn1, yn1);
getch();
closegraph();
}

```



7C.

```
#include <graphics.h>
#include <stdlib.h>
#include <stdio.h>
#include <conio.h>

void main(){
    int graphdriver = DETECT, graphmode;
    int x1, y1, x2, y2, x3, y3;
    int xn1, yn1, xn2, yn2, xn3, yn3;
    int choice;
    int midX, midY;

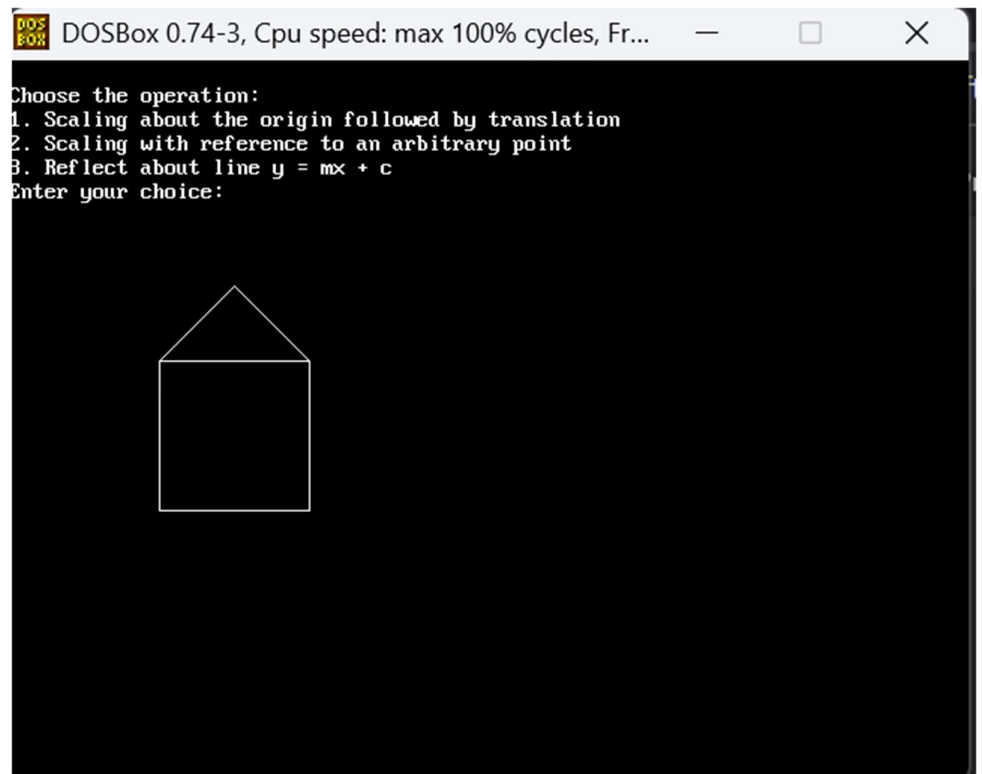
    printf("Enter the coordinates of the triangle (x1, y1, x2, y2, x3, y3): ");
    scanf("%d%d%d%d%d%d", &x1, &y1, &x2, &y2, &x3, &y3);
    initgraph(&graphdriver, &graphmode, "C:\\TURBOC3\\BGI");
    midX = getmaxx() / 2;
    midY = getmaxy() / 2;
    line(x1, y1, x2, y2);
    line(x2, y2, x3, y3);
    line(x3, y3, x1, y1);

    printf("\nChoose the type of reflection:\n");
    printf("1. Reflection over X-axis\n");
    printf("2. Reflection over Y-axis\n");
    printf("3. Reflection over Origin\n");
    printf("Enter your choice: ");
    scanf("%d", &choice);
    switch (choice)
    {case 1:
        xn1 = x1;
        yn1 = 2 * midY - y1;
        xn2 = x2;
        yn2 = 2 * midY - y2;
```

```

xn3 = x3;
yn3 = 2 * midY - y3;
break;
case 2:
xn1 = 2 * midX - x1;
yn1 = y1;
xn2 = 2 * midX - x2;
yn2 = y2;
xn3 = 2 * midX - x3;
yn3 = y3;
break;
case 3:
xn1 = 2 * midX - x1;
yn1 = 2 * midY - y1;
xn2 = 2 * midX - x2;
yn2 = 2 * midY - y2;
xn3 = 2 * midX - x3;
yn3 = 2 * midY - y3;
break;
default:
printf("Invalid choice\n");
closegraph();
exit(0);
}
setcolor(RED);
line(xn1, yn1, xn2, yn2);
line(xn2, yn2, xn3, yn3);
line(xn3, yn3, xn1, yn1);
getch();
closegraph();
}

```



8A.

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

#define TOP 8
#define BOTTOM 4
#define RIGHT 2
#define LEFT 1

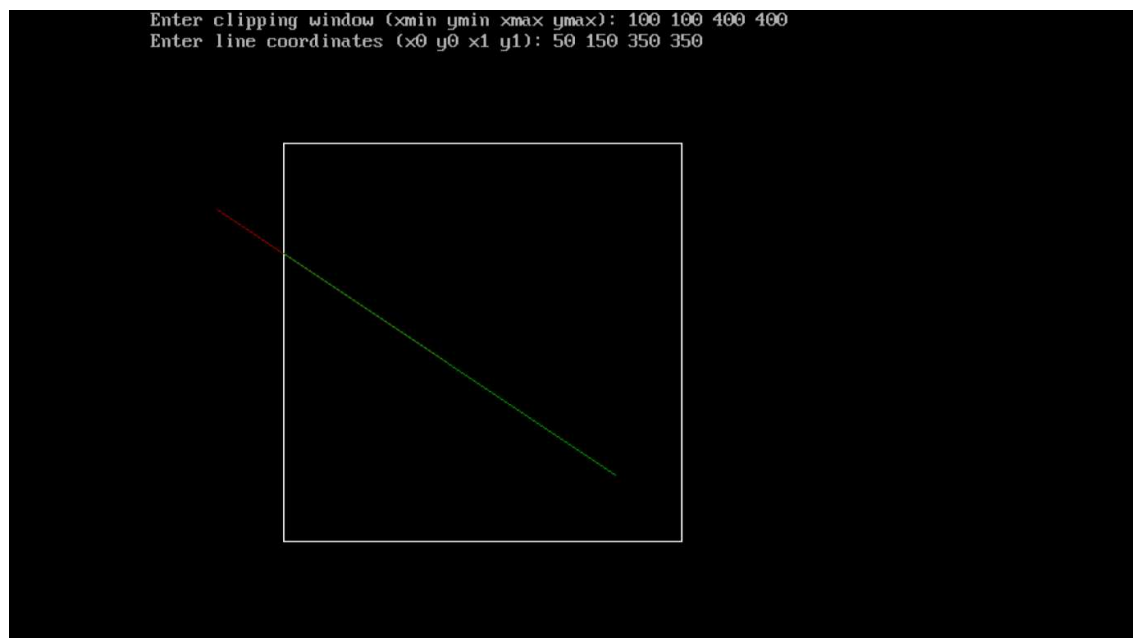
int xmin, ymin, xmax, ymax;

int computeCode(int x, int y) {
    int code = 0;
    if (y > ymax) code |= TOP;
    if (y < ymin) code |= BOTTOM;
    if (x > xmax) code |= RIGHT;
    if (x < xmin) code |= LEFT;
    return code;
}

void cohenSutherlandClip(int x0, int y0, int x1, int y1) {
    int code0 = computeCode(x0, y0);
    int code1 = computeCode(x1, y1);
    int codeOut;
    int accept = 0;
    float x, y;
    while (1) {
        if ((code0 == 0) && (code1 == 0)) { // Both endpoints inside
            accept = 1;
            break;
        } else if (code0 & code1) { // Both endpoints share an outside region (completely
            outside)
            break;
        } else {
```

```
codeOut = code0 ? code0 : code1;
if (codeOut & TOP) {
    x = x0 + (float)(x1 - x0) * (ymax - y0) / (y1 - y0);
    y = ymax;
} else if (codeOut & BOTTOM) {
    x = x0 + (float)(x1 - x0) * (ymin - y0) / (y1 - y0);
    y = ymin;
} else if (codeOut & RIGHT) {
    y = y0 + (float)(y1 - y0) * (xmax - x0) / (x1 - x0);
    x = xmax;
} else if (codeOut & LEFT) {
    y = y0 + (float)(y1 - y0) * (xmin - x0) / (x1 - x0);
    x = xmin;
}
if (codeOut == code0) {
    x0 = (int)x;
    y0 = (int)y;
    code0 = computeCode(x0, y0);
} else {
    x1 = (int)x;
    y1 = (int)y;
    code1 = computeCode(x1, y1);
}
}
}
if (accept) {
    setcolor(GREEN);
    line(x0, y0, x1, y1);
}
}
void main() {
```

```
int gd = DETECT, gm;  
int x0, y0, x1, y1;  
initgraph(&gd, &gm, "C:\\Turboc3\\BGI");  
printf("Enter clipping window (xmin ymin xmax ymax): ");  
scanf("%d %d %d %d", &xmin, &ymin, &xmax, &ymax);  
printf("Enter line coordinates (x0 y0 x1 y1): ");  
scanf("%d %d %d %d", &x0, &y0, &x1, &y1);  
// Draw clipping window  
setcolor(WHITE);  
rectangle(xmin, ymin, xmax, ymax);  
setcolor(RED);  
line(x0, y0, x1, y1);  
getch();  
// Perform clipping and draw the result  
cohenSutherlandClip(x0, y0, x1, y1);  
getch();  
closegraph();  
}
```



9A.

```
#include <graphics.h>
#include <stdio.h>
#include <conio.h>
#include <dos.h>

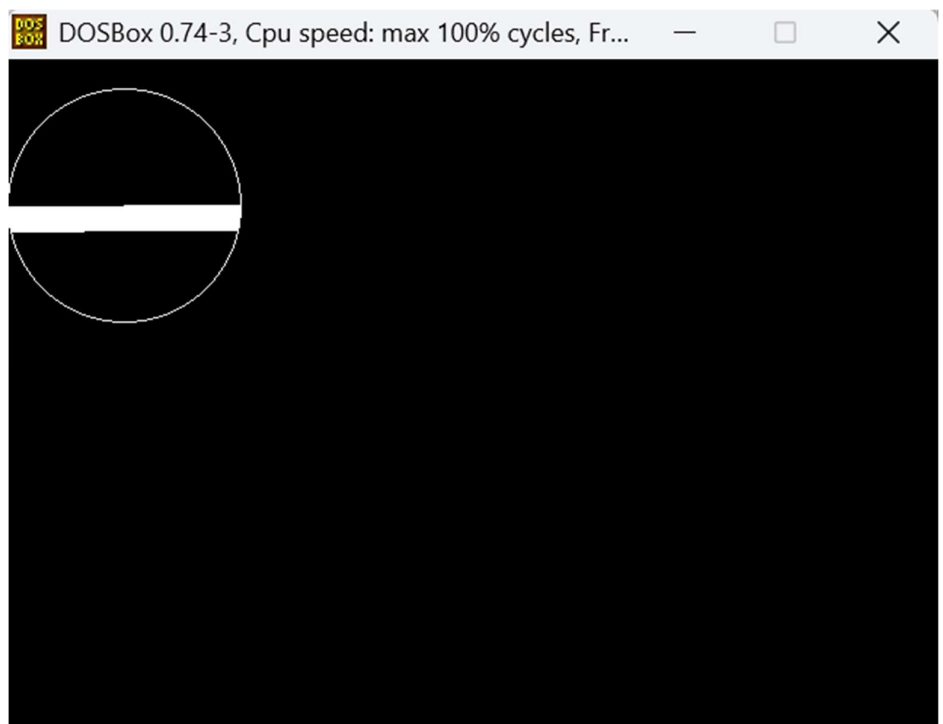
void customFloodFill(int x, int y, int oldcolor, int newcolor) {
    if (getpixel(x, y) == oldcolor) {
        delay(20);
        putpixel(x, y, newcolor);
        customFloodFill(x + 1, y, oldcolor, newcolor);
        customFloodFill(x - 1, y, oldcolor, newcolor);
        customFloodFill(x, y + 1, oldcolor, newcolor);
        customFloodFill(x, y - 1, oldcolor, newcolor);
    }
}

void main() {
    int gd = DETECT, gm;
    int x, y, radius;

    printf("Enter x and y\nposition for circle: ");
    scanf("%d %d", &x, &y);
    printf("Enter radius of\n circle: ");
    scanf("%d", &radius);

    initgraph(&gd, &gm,
"C:\\\\Turboc3\\BGI");
    circle(x, y, radius);
    customFloodFill(x, y,
BLACK, WHITE);

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



9B.

```
#include <graphics.h>
#include <stdio.h>
#include <conio.h>
#include <dos.h>

void boundaryFill(int x, int y, int fillColor, int boundaryColor) {
    if (getpixel(x, y) != boundaryColor && getpixel(x, y) != fillColor) {
        delay(20);
        putpixel(x, y, fillColor);
        boundaryFill(x + 1, y, fillColor, boundaryColor);
        boundaryFill(x - 1, y, fillColor, boundaryColor);
        boundaryFill(x, y + 1, fillColor, boundaryColor);
        boundaryFill(x, y - 1, fillColor, boundaryColor);
    }
}

void main() {
    int gd = DETECT, gm;
    int x, y, radius;

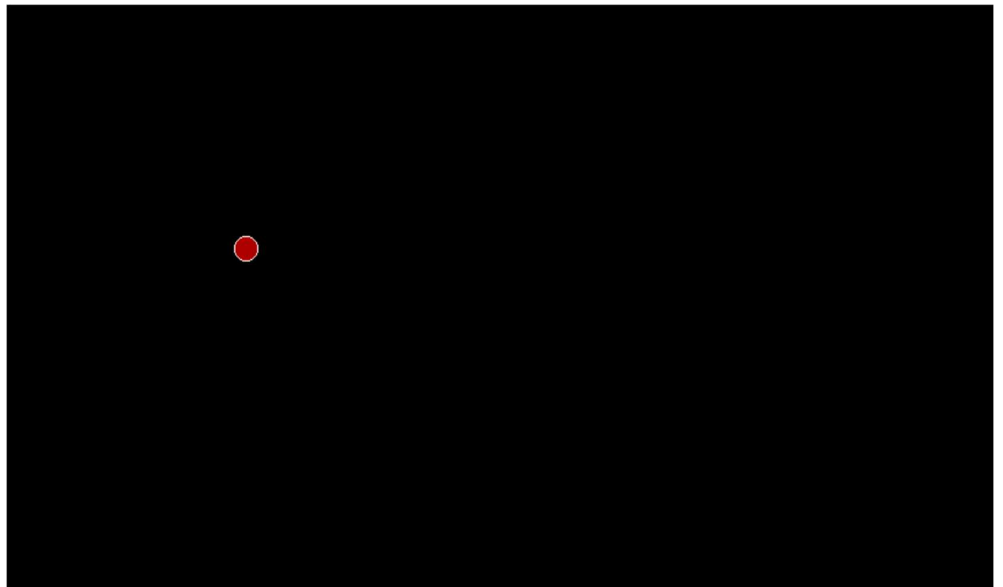
    printf("Enter x and y\nposition for circle: ");
    scanf("%d %d", &x, &y);

    printf("Enter radius of\n circle: ");
    scanf("%d", &radius);

    initgraph(&gd, &gm,
"C:\\\\Turb
    circle(x, y, radius);

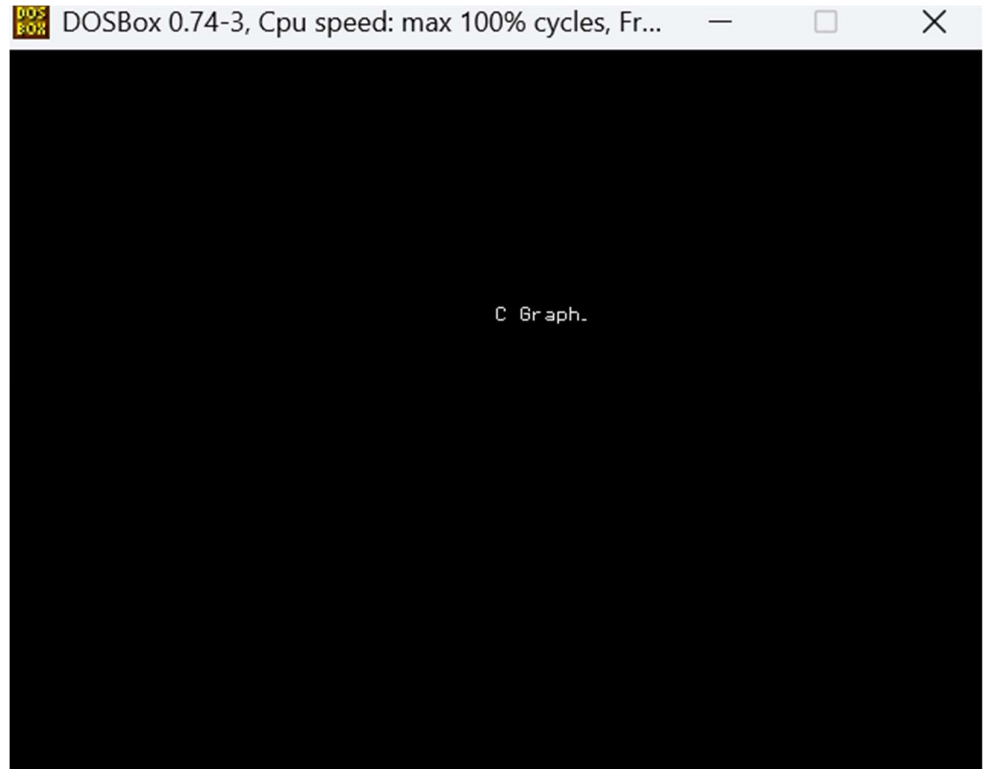
    boundaryFill(x, y, RED, WHITE);

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



10A.

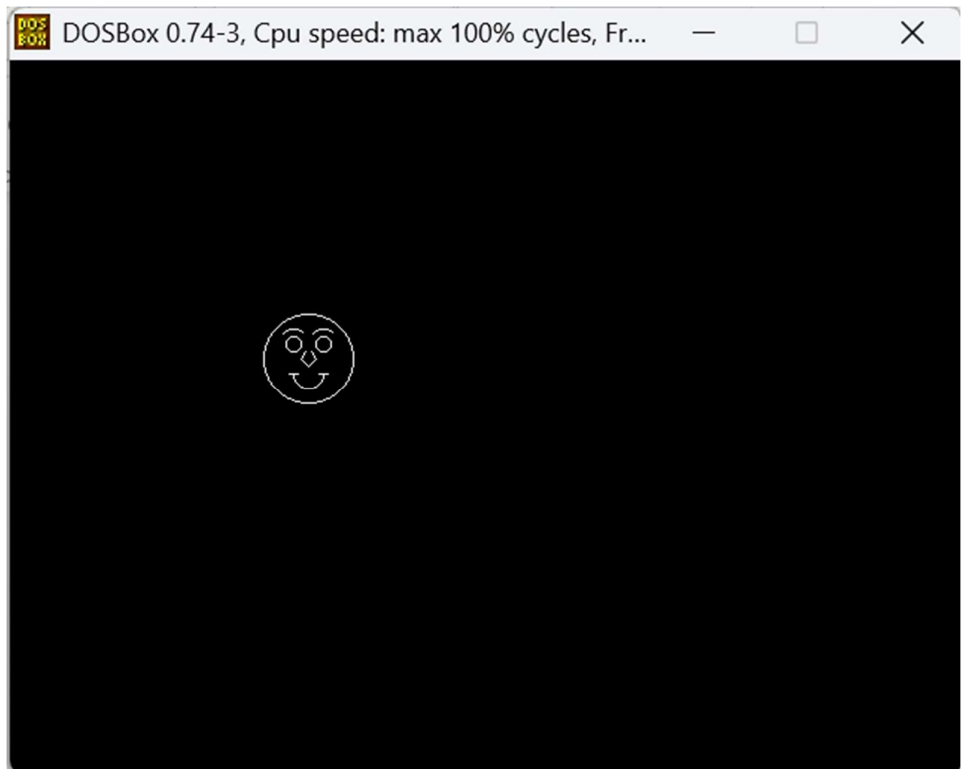
```
#include<graphics.h>
#include<conio.h>
#include<stdio.h>
#include<dos.h>
void main()
{
int gd=DETECT,gm,i,maxx,maxy,key0;
initgraph(&gd,&gm,"C:\\TURBOC3\\BGI");
maxx=getmaxx();
maxy=getmaxy();
while(!kbhit())
{
for(i=0;i<maxy;i++)
{
cleardevice();
settextstyle(2,0,5);
outtextxy(maxx/2,i,"C
Graphics");
delay(100);
}
}
getch();
}
```



10B.

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

void main()
{
    int gd=DETECT,gm;
    initgraph(&gd,&gm,"C:\\TURBOC3\\BGI");
    circle(200,200,30);
    circle(190,190,5);
    arc(190,190,50,130,10);
    circle(210,190,5);
    arc(210,190,50,130,10);
    arc(200,210,180,360,10);
    line(187,210,193,210);
    line(207,210,213,210);
    line(198,195,195,200);
    line(202,195,205,200);
    line(195,200,200,205);
    line(205,200,200,205);
    getch();
    closegraph();
}
```



10C.

```
#include<graphics.h>

#include <graphics.h>

#include <dos.h>

#include <conio.h>

void main() {

    int i, j = 0, gd = DETECT, gm;

    initgraph(&gd, &gm, "C:\\\\Turboc3\\\\BGI");

    setttextstyle(DEFAULT_FONT, HORIZ_DIR, 2);

    outtextxy(25, 240, "Press any key to view the moving car");

    getch();

    for (i = 0; i <= 420; i += 10, j++) {

        setcolor(j % 16);

        rectangle(50 + i, 275, 150 + i, 400);

        rectangle(150 + i, 350, 200 + i, 400);

        circle(75 + i, 410, 10);

        circle(175 + i, 410, 10);

        delay(100);

        if (i < 420) {

            setcolor(BLACK);

            rectangle(50 + i, 275, 150 + i, 400);

            rectangle(150 + i, 350, 200 + i, 400);

            circle(75 + i, 410, 10);

            circle(175 + i, 410, 10);

        }

    }

    getch();

    closegraph();

}
```

