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**QUES 1. WRITE A C PROGRAM TO MAKE A HUT USING BUILT-IN GRAPHICS FUNCTION.**

```
#include<graphics.h>
#include<conio.h>
void main()
{
    int gd=DETECT,gm;
    clrscr();
    initgraph(&gd,&gm,"..\\BGI");
    setcolor(6);
    rectangle(50,180,150,300);
    rectangle(150,180,320,300);
    rectangle(80,250,120,300);
    line(100,100,50,180);
    line(100,100,300,100);
    line(300,100,320,180);
    line(100,100,150,180);
    getch();
    closegraph();
}
```

**OUTPUT**



**QUES 2. WRITE A C PROGRAM TO MAKE AND MOVE A FISH USING BUILT-IN GRAPHICS FUNCTION.**

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

void main()
{
int gd=DETECT,gm;
int i;
clrscr();

initgraph(&gd,&gm,"C:\\TurboC3\\BGI");
setcolor(RED);
setbkcolor(1);
for(i=0;i<50;i++)
{
delay(200);
cleardevice();

ellipse(100-i,100,0,360,50,50);
circle(70-i,80,5);
arc(70-i,120,200,300,15);
line(150-i,100,185-i,140);
line(150-i,100,185-i,50);
line(185-i,140,185-i,50);
line(90-i,50,130-i,20);
line(130-i,20,130-i,60);
line(90-i,150,120-i,185);
line(120-i,185,120-i,145);
}
getch();
closegraph();
}
```

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**OUTPUT**



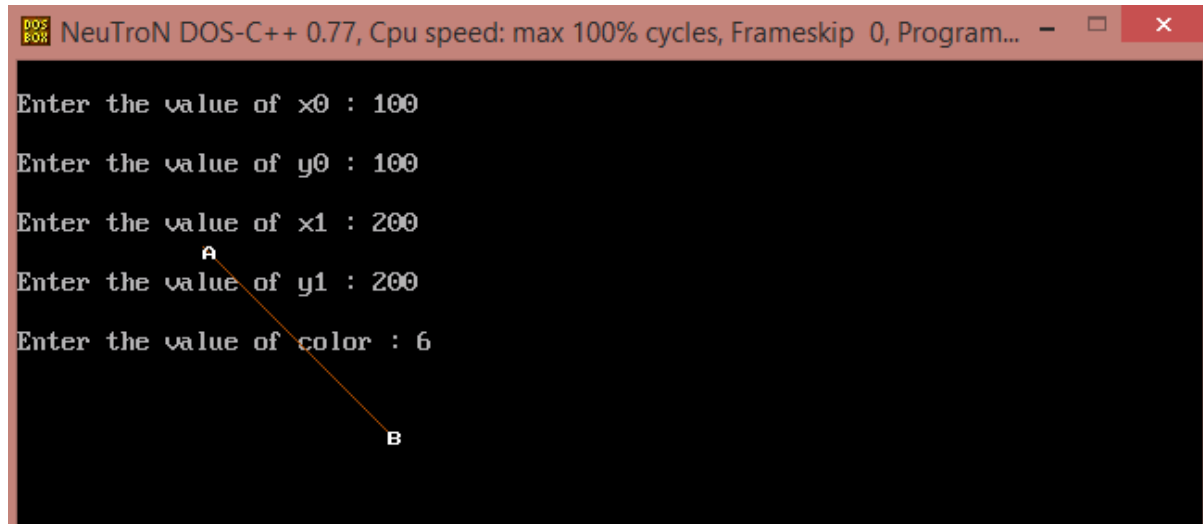
**QUES 3. WRITE A C PROGRAM TO DRAW A LINE USING DDA ALGORITHM.**

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

void line1(int x0, int y0, int x1, int y1,int value)
{
    int x;
    double dy=y1-y0;
    double dx=x1-x0;
    double m=dy/dx;
    double y=y0;
    for(x=x0;x<=x1;x++)
    {
        putpixel(x,y,value);
        y+=m;
    }
}

void main()
{
    int val,x0,x1,y0,y1;
    int gd=DETECT,gm;
    initgraph(&gd,&gm,"..\\bgi");
    printf("\nEnter the value of x0 : ");
    scanf("%d",&x0);
    printf("\nEnter the value of y0 : ");
    scanf("%d",&y0);
    printf("\nEnter the value of x1 : ");
    scanf("%d",&x1);
    printf("\nEnter the value of y1 : ");
    scanf("%d",&y1);
    printf("\nEnter the value of color : ");
    scanf("%d",&val);
    line1(x0,y0,x1,y1,val);
    outtextxy(x0,y0,"A");
    outtextxy(x1,y1,"B");
    getch();
    closegraph();
    restorecrtmode();
}
```

### OUTPUT



```
NeuTroN DOS-C++ 0.77, Cpu speed: max 100% cycles, Frameskip 0, Program...
Enter the value of x0 : 100
Enter the value of y0 : 100
Enter the value of x1 : 200
Enter the value of y1 : 200
Enter the value of color : 6
```

**QUES 4. WRITE A C PROGRAM TO DRAW A LINE USING BRESENHAM'S ALGORITHM.**

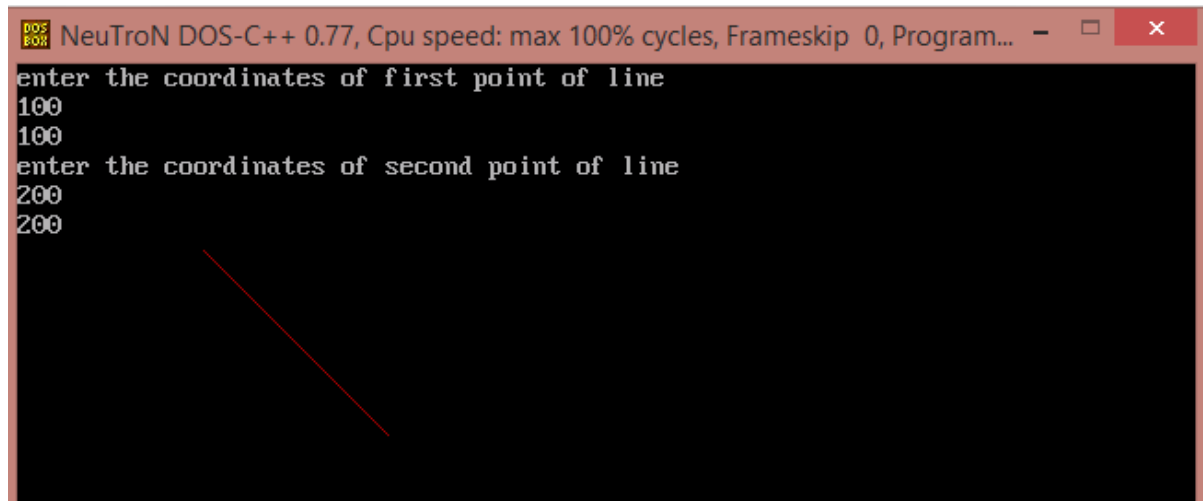
```
#include<stdio.h>
#include<conio.h>
#include<graphics.h>
void main()
{
    int x1,x2,y1,y2,dx,dy,x,y;
    float d;
    int gdriver=DETECT,gmode;
    initgraph(&gdriver,&gmode,"..\\bgi");
    printf("enter the coordinates of first point of line\n");
    scanf("%d%d",&x1,&y1);
    printf("enter the coordinates of second point of line\n");
    scanf("%d%d",&x2,&y2);
    dy=y2-y1;
    dx=x2-x1;
    x=x1;
    y=y1;
    d=(2*dy)-dx;
    while(x<=x2)
    {
        if(d<0)
        {
            x++;
            putpixel(x,y,RED);
            d=d+(2*dy);
        }
        else
        {
            x++;
            y++;
            putpixel(x,y,RED);
            d=d+(2*dy)-(2*dx);
        }
    }
    closegraph();
    getch();
}
```



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### OUTPUT



```
NeuTroN DOS-C++ 0.77, Cpu speed: max 100% cycles, Frameskip 0, Program...
enter the coordinates of first point of line
100
100
enter the coordinates of second point of line
200
200
```

**QUES5. WRITE A C PROGRAM TO DRAW AND FILL A FLAG USING BUILT IN FUNCTIONS.**

```
#include<conio.h>
#include<graphics.h>
void main()
{
    int gdriver=DETECT,gmode,i,j=0;
    initgraph(&gdriver,&gmode,"C:\\\\TurboC3\\\\BGI");
    cleardevice();
    rectangle(150,100,400,150);
    setfillstyle(SOLID_FILL,LIGHTRED);
    floodfill(250,110,WHITE);

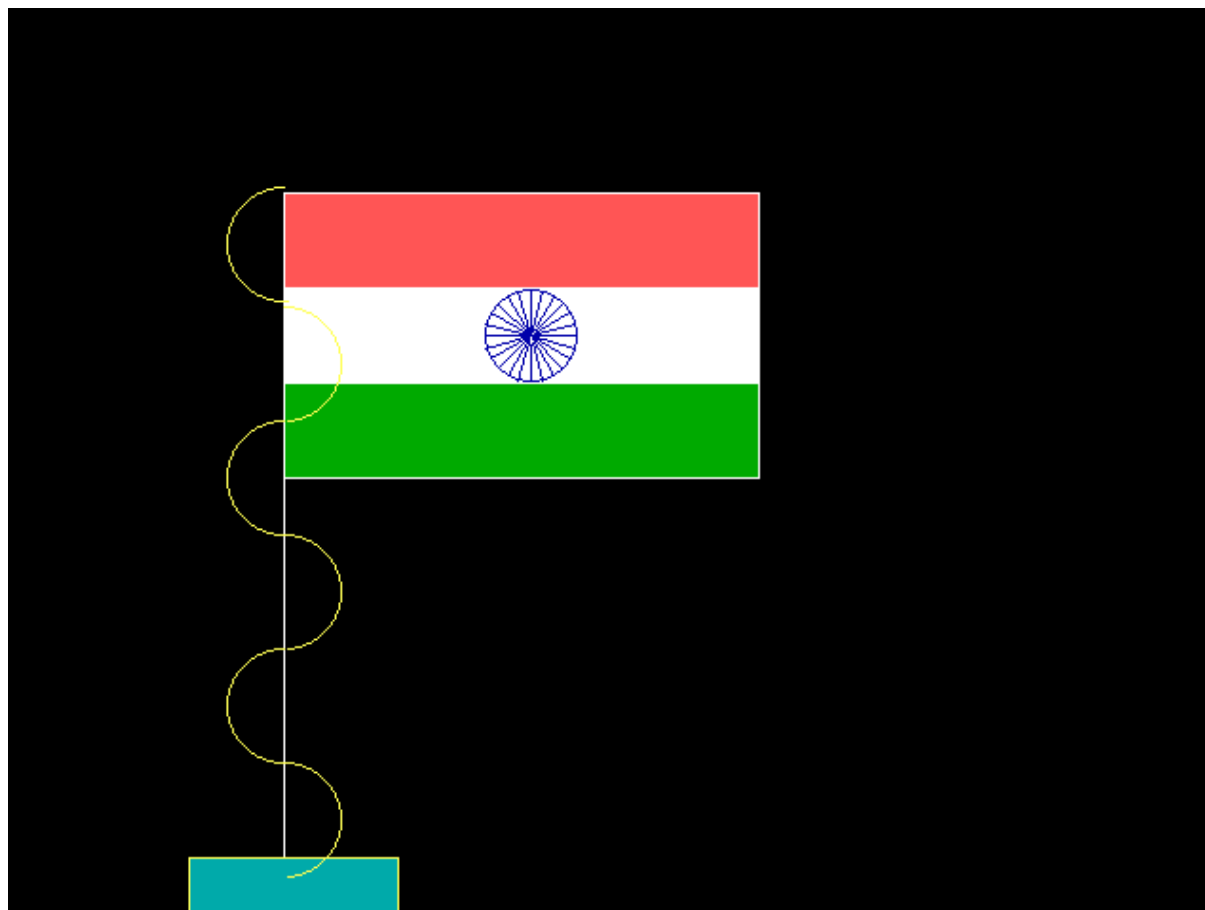
    rectangle(150,150,400,200);
    setfillstyle(SOLID_FILL,WHITE);
    floodfill(250,180,WHITE);
    rectangle(150,200,400,250);
    setfillstyle(SOLID_FILL,GREEN);
    floodfill(250,220,WHITE);

    line(150,200,150,800);
    setcolor(BLUE);
    circle(280,175,24);
    for(i=0;i<24;i++)
    {
        setfillstyle(SOLID_FILL,WHITE);
        setcolor(BLUE);
        pieslice(280,175,0+j,15+j,24);
        j=j+15;
    }
    setcolor(YELLOW);
    arc(150,127,90,275,30);
    arc(150,190,275,90,30);
    arc(150,250,90,275,30);
    arc(150,310,275,90,30);
    arc(150,370,90,275,30);
    arc(150,430,275,90,30);
    rectangle(100,450,210,490);
    setfillstyle(SOLID_FILL,CYAN);
    floodfill(200,470,YELLOW);

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

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**QUES 6. WRITE A C PROGRAM TO DRAW A CIRCLE USING MID-POINT  
ALGORITHM.**

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

void cplot(int,int,int,int);

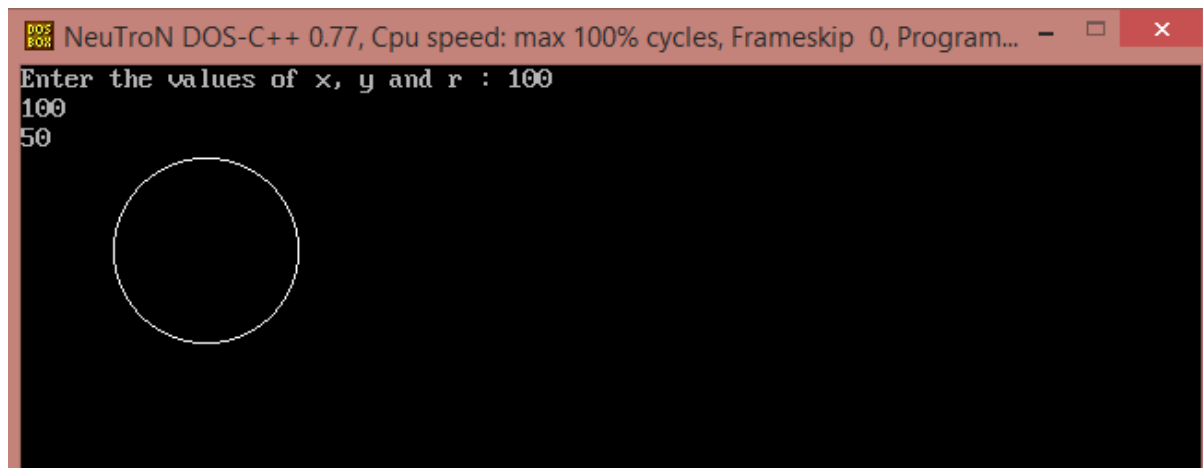
void main()
{
    int gd=DETECT,gm;
    int x,y,p,xc,yc,r;
    initgraph(&gd,&gm,"..\\bgi");
    cleardevice();
    printf("Enter the values of x,y (center) and r (radius) : ");
    scanf("%d%d%d",&xc,&yc,&r);
    x=0;y=r;
    p=1-r;
    cplot(xc,yc,x,y);
    while(x<y)
    {
        x++;
        if(p<0)
            p+=2*x+1;
        else
        {
            y--;
            p+=2*(x-y)+1;
        }
        cplot(xc,yc,x,y);
    }
    getch();
    closegraph();
}

void cplot(int xc,int yc,int x,int y)
{
    putpixel(xc+x,yc+y,15);
    putpixel(xc-x,yc+y,15);
    putpixel(xc+x,yc-y,15);
    putpixel(xc-x,yc-y,15);
    putpixel(xc+y,yc+x,15);
    putpixel(xc-y,yc+x,15);
    putpixel(xc+y,yc-x,15);
    putpixel(xc-y,yc-x,15);
}
```

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### OUTPUT



**QUES7. Write a C program to draw an ellipse using midpoint algorithm**

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

double sq(double x)
{
double y;
y=x*x;
return y;
}

void ellipsepoint(int x, int y, int value)
{
double a=325;
double b=225;

putpixel(x+a,y+b,value);
putpixel(x+a,-y+b,value);
putpixel(-x+a,y+b,value);
putpixel(-x+a,-y+b,value);
}

void midpointellipse(double a, double b, int value)
{
double d2;
double x=0;
double y=b;
double d1=sq(b)-(sq(a)*b)+(0.25*sq(a));
ellipsepoint(x,y,value);
while( ( sq(a)*(y-5) ) > ( sq(b)*(x+1) ) )
{
if(d1<0)
{
d1+=(sq(b)*(2*x+3));
}
else
{
d1+=(sq(b)*(2*x+3)+sq(a)*(-2*y+2));
y--;
}
x++;
ellipsepoint(x,y,value);
}
d2=(sq(b)*(sq(x+0.5))) + (sq(a)*(sq(y-1))) - (sq(a)*sq(b));
while(y>0)
{
```

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```
if(d2<0)
{
    d2+=(sq(b)*(2*x+2)) + (sq(a)*(-2*y+3));
    x++;
}
else
{
    d2+=(sq(a)*(-2*y+3));
}
y--;
ellipsepoint(x,y,value);
}
}

void main()
{
    int val;
    int a,b;
    int gd=DETECT,gm;
    initgraph(&gd,&gm,"c:\\tc\\bgi");
    printf("\nEnter the value of x co-ordinate \n");
    scanf("%d",&a);
    printf("\nEnter the value of y co-ordinate \n");
    scanf("%d",&b);
    printf("\nEnter the value of color \n");
    scanf("%d",&val);
    midpointellipse(a,b,val);
    //outtextxy(x0,y0,"A");
    //outtextxy(x1,y1,"B");
    getch();
    closegraph();
    restorecrtmode();
}
```

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OUTPUT OF QUES7.





**QUES8. Write a menu driven C program to translate, scale and rotate a line, triangle and square about the origin**

```
#include<stdio.h>
#include<conio.h>
#include<graphics.h>
void main()
{ int ch,x2,x1,y2,y1;
int gdriver=DETECT,gmode;
initgraph(&gdriver,&gmode,"../bgi");
setcolor(4);
printf("Enter the initial points of line\n");
scanf("%d%d",&x1,&y1);
printf("Enter the end points of line\n");
scanf("%d%d",&x2,&y2);
line(x1,y1,x2,y2);
printf("\n\n1.translation\n2.rotation\n");
printf("Enter your choice:\n");
scanf("%d",&ch);
if(ch==1)
{ int tx,ty;
setcolor(WHITE);
printf("Enter tx and ty:");
scanf("%d%d",&tx,&ty);
printf("after translation:");
line(x1+tx,y1+ty,x2+tx,y2+ty);
}
else if(ch==2)
{ int rot,mult,t[3][3],b[3][2],a[3][2];
int i,j,k;
line(getmaxx()/2,0,getmaxx()/2,getmaxy());
line(0,getmaxy()/2,getmaxx(),getmaxy()/2);
setcolor(WHITE);
line(x1,y1,x2,y2);
/*coordinate matrix*/
a[0][0]=x1;
a[0][1]=x2;
a[0][2]=1;
a[1][0]=y1;
a[1][1]=y2;
a[1][2]=1;
scanf("%d",&rot);
/*tranlating matrix*/
setcolor(WHITE);
t[0][0]=cos(rot*3.14/180);
t[0][1]=-sin(rot*3.14/180);
t[0][2]=0;
t[1][0]=sin(rot*3.14/180);
t[1][1]=cos(rot*3.14/180);
t[1][2]=0;
```

```
t[2][0]=0;
t[2][1]=0;
t[2][2]=1;
for(i=0;i<=2;i++)
{ for(j=0;j<=1;j++)
{ mult=0;
for(k=0;k<=2;k++)
{ mult=mult+t[i][k]*a[k][j];
}
b[i][j]=mult;
}
}
printf("after scaling:");
line(getmaxx()/2+x1,getmaxy()/2-y1,getmaxx()/2+x2,getmaxy()/2-y2);
}
else
{
printf("wrong choice");
}
//closegraph();
getch();
}
```

//for circle(scaling)

```
#include<stdio.h>
#include<conio.h>
#include<graphics.h>
void putp(int x,int y,int v)
{
putpixel(320+x,240+y,v);
putpixel(320+x,240-y,v);
putpixel(320-x,240+y,v);
putpixel(320-x,240-y,v);
putpixel(320+y,240+x,v);
putpixel(320+y,240-x,v);
putpixel(320-y,240+x,v);
putpixel(320-y,240-x,v);
}
void main()
{
int x=0,y,r,p,value,sx,sy;
int gdriver=DETECT,gmode;
initgraph(&gdriver,&gmode,"../bgi");
printf("enter the radius\n");
scanf("%d",&r);
printf("enter the value of color: v(0-14)\n");
scanf("%d",&value);

p=1-r;
y=r;
while(y>x)
{
putp(x,y,WHITE);
if(p<0)
```

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```
p=p+2*x+3;
else
{
p+=2*(x-y)+5;
y--;
}
x++;
}
printf("Enter scaling points:\n");
scanf("%d",&sx);
setcolor(RED);
r*=sx;
circle(x+400,y+300,r);
getch();
closegraph();
}
```

**QUES9. Write a C program to reflect a triangle\_**

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

```
#include<graphics.h>
#include<conio.h>
void reflect(int x,int y)
{
    int arr[3][3];
    int x1,y1,x2,y2,x3,y3,i,j,k;
    int refy[3][3]={1,0,0,0,-1,0,0,0,1};
    int arr1[3][3]={0};

    printf("Enter the value of x1,y1");
    scanf("%d%d",&x1,&y1);
    arr[0][0]=x1,arr[1][0]=y1,arr[2][0]=1;

    printf("Enter the value of x2,y2");
    scanf("%d%d",&x2,&y2);
    arr[0][1]=x2,arr[1][1]=y2,arr[2][1]=1;

    printf("Enter the value of x3,y3");
    scanf("%d%d",&x3,&y3);
    arr[0][2]=x3,arr[1][2]=y3,arr[2][2]=1;

    setcolor(6);
    line(0,y/2,x,y/2);
    line(x/2,0,x/2,y);
    line(arr[0][0]+x/2,arr[1][0]+y/2,arr[0][1]+x/2,arr[1][1]+y/2);
    line(arr[0][0]+x/2,arr[1][0]+y/2,arr[0][2]+x/2,arr[1][2]+y/2);
    line(arr[0][2]+x/2,arr[1][2]+y/2,arr[0][1]+x/2,arr[1][1]+y/2);

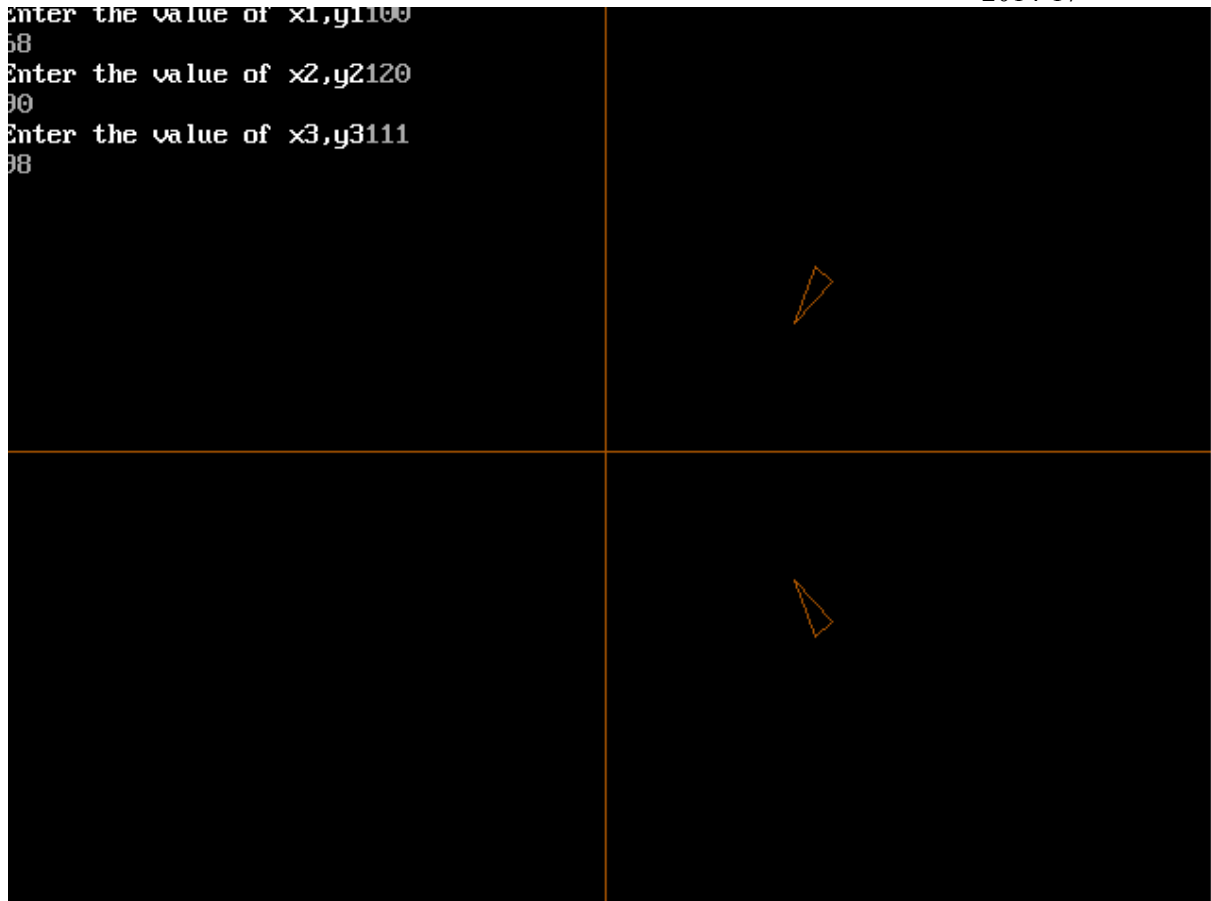
    for(i=0;i<3;i++)
    for(j=0;j<3;j++)
    for(k=0;k<3;k++)
    {
        arr1[i][j]+=refy[i][k]*arr[k][j];
    }
    line(arr1[0][0]+x/2,arr1[1][0]+y/2,arr1[0][1]+x/2,arr1[1][1]+y/2);
    line(arr1[0][0]+x/2,arr1[1][0]+y/2,arr1[0][2]+x/2,arr1[1][2]+y/2);
    line(arr1[0][2]+x/2,arr1[1][2]+y/2,arr1[0][1]+x/2,arr1[1][1]+y/2);
}
void main()
{
    int gd=DETECT,gm,x,y;
    initgraph(&gd,&gm,"");
    x=getmaxx();
    y=getmaxy();
    //printf("x=%d y=%d",x,y);
    setcolor(6);
    //x1=x/2,y1=y/2;
    reflect(x,y);
    getch();}
```

**/OUTPUT OF QUES9**

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Enter the value of x1,y1100  
58  
Enter the value of x2,y2120  
90  
Enter the value of x3,y3111  
98



**QUES10. Write a C program to shear a polygon**

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

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```
#include<graphics.h>
void main()
{
int gd=DETECT,ch,gm,x1,x2,y1,y2,x3,x4,y3,y4;
float i;
clrscr();
initgraph(&gd,&gm,"");
x1=100;
x2=200;
x3=200 ;
x4=100 ;
y1=220;
y2=320 ;
y3= 220;
y4=320;

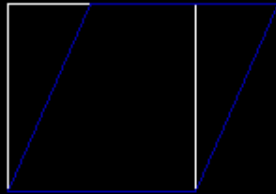
line(x1,y1,x3,y3);
line(x1,y1,x4,y4);
line(x2,y2,x4,y4);
line(x2,y2,x3,y3);
printf("enter your choice \n 1.xshear\n2.yshear");
scanf("%d",&ch);
if(ch==1)
{
printf("enter xshear");
scanf("%f",&i);
setcolor(BLUE);
x1=x1+i*y1;
x3=x3+i*y3;
printf("%d\n%d",x1,x3);
line(x1,y1,x3,y3);
line(x1,y1,x4,y4);
line(x2,y2,x4,y4);
line(x2,y2,x3,y3);
}
else if(ch==2){
printf("enter yshear");
scanf("%f",&i);
setcolor(BLUE);
y3=y3+i*x3;
y2=y2+i*x2;
printf("%d\n%d",y1,y3);
line(x1,y1,x3,y3);
line(x1,y1,x4,y4);
line(x2,y2,x4,y4);
line(x2,y2,x3,y3); }
else
printf("wrong choice");
```

```
getch();}
OUTPUT OF QUES10
```

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```
enter your choise
1.xshear
2.yshear1
enter xshear0.20
144
244
```



QUES11. Write a C program to fill polygon using boundary algorithm

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

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```
#include<graphics.h>
#include<stdio.h>
void main()
{
    int gd=DETECT,gm,col,z,x=100,y=100,x1=300,y1=300,c=1;
    initgraph(&gd,&gm,"C:\\TurboC3\\BGI");
    clrscr();
    rectangle(x,y,x1,y1);
    x=x+1;
    z=x;
    y=y+1;

    // col=getpixel(x,y);
    // printf("%d",col);
    col=getpixel(x,y);
    printf("%d",col);
    while(col!=15)
    {
        while(col!=15)
        { delay(1);
          putpixel(x,y,c);

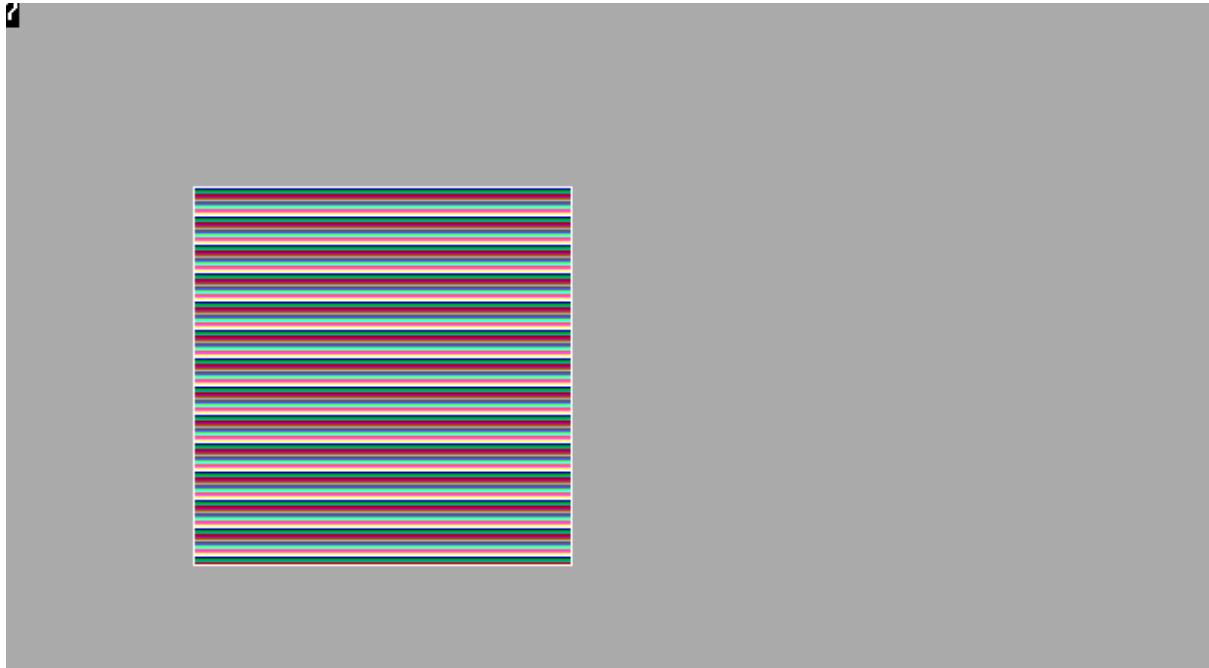
          x++;
          col=getpixel(x,y);
        }
        y++;
        x=z;
        if(c<15)
        c++;
        else
        c=1;
        // c--;
        col=getpixel(x,y);
    }
    getch();
}
```

OUTPUT OF QUES11



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QUES12. Write a C program to fill polygon using flood fill algorithm

```
#include<conio.h>
#include<graphics.h>
#include<stdio.h>
void main()
{
    int gd=DETECT,gm,col,z,x=100,y=300,c=10;
    initgraph(&gd,&gm,"C:\\TurboC3\\BGI");
    clrscr();
    setcolor(5);
    line(x,x,y,x);
    setcolor(3);
    line(x,x,x,y);
    setcolor(1);
    line(x,y,y,y);
    setcolor(14);
    line(y,x,y,y);
    x=x+1;
    z=x;
    y=100;
    y=y+1;
    col=getpixel(x,y);
    printf("%d",col);

    while( getpixel(x,y)==7)
    {
        while( getpixel(x,y)==7)
        { delay(1);
          putpixel(x,y,c);

        }
        x++;

    }
    y++;
    x=z;

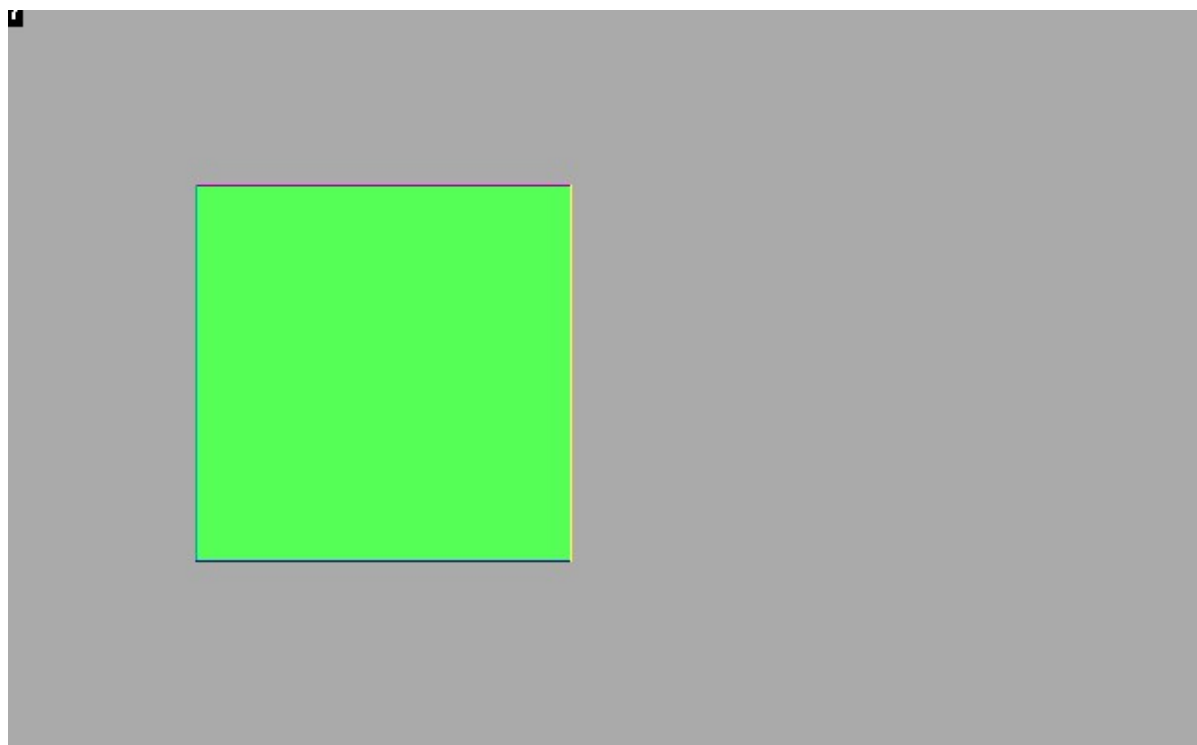
}

getch();
}
```

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OUTPUT OF QUES12.



QUES13. Write a C program to draw a 4 point Bezier curve

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

void main()
{
    int gd = DETECT, gm, x, x1, x2, x3, y, y1, y2, y3;
    double u, a, b, b0x, b1x, b2x, b3x, b0y, b1y, b2y, b3y;
    initgraph(&gd, &gm, "");
    printf("enter the value of p0 point");
    scanf("%d%d", &x, &y);
    printf("enter the value of p1 point");
    scanf("%d%d", &x1, &y1);
    printf("enter the value of p2 point");
    scanf("%d%d", &x2, &y2);
    printf("enter the value of p3 point");
    scanf("%d%d", &x3, &y3);

    for(u=0; u<=1; u=u+0.000001)
    {
        b0x=(1-u)*(1-u)*(1-u)*x;
        b1x=(1-u)*(1-u)*x1;
        b2x=(1-u)*u*u*x2;
        b3x=u*u*u*x3;
        a=b0x+b1x+b2x+b3x;
        b0y=(1-u)*(1-u)*(1-u)*y;
        b1y=(1-u)*(1-u)*y1;
        b2y=(1-u)*u*u*y2;
        b3y=u*u*u*y3;
        b=b0y+b1y+b2y+b3y;
        putpixel(a, b, 3);

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

OUTPUT OF QUES13

```
enter the value of p0 point100
111
enter the value of p1 point200
250
enter the value of p2 point299
250
enter the value of p3 point123
234
```

QUES14. Write a C program to demonstrate CohenSutherland line clipping algorithm

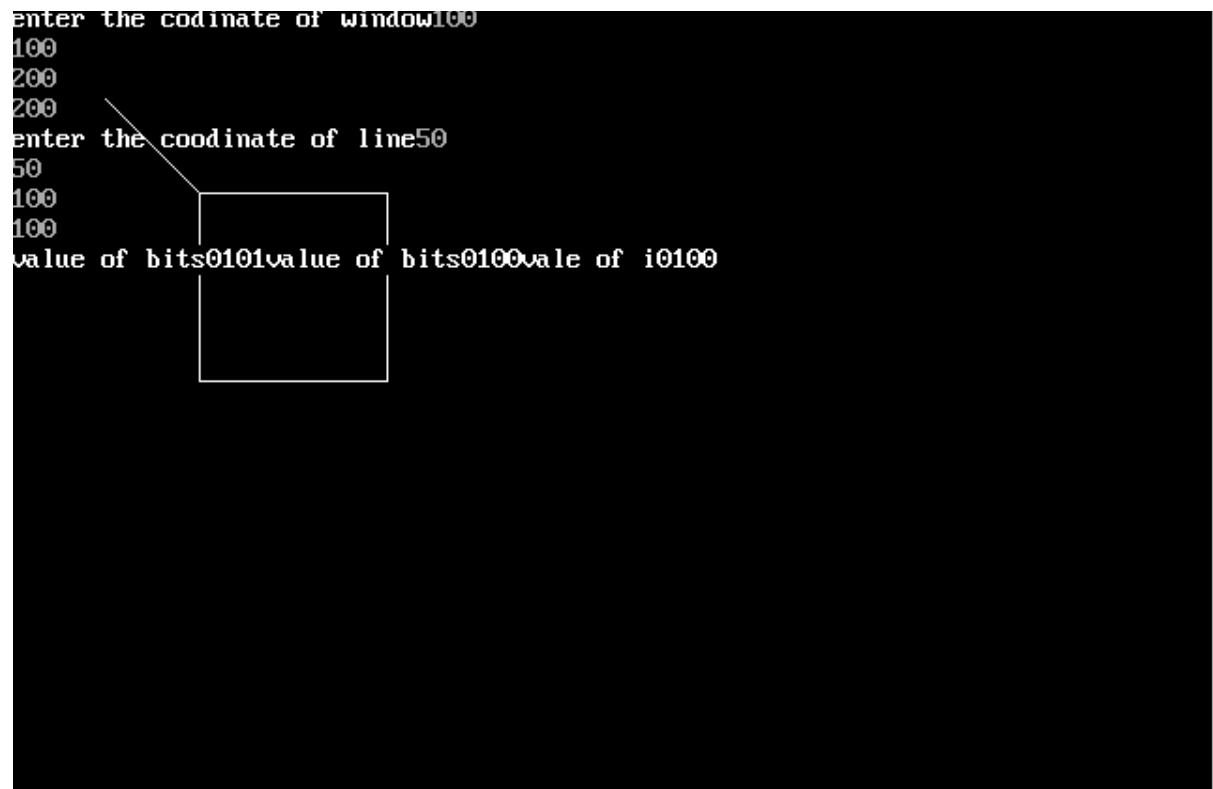
```
#include<stdio.h>
#include<graphics.h>
void main()
{
    int gd=DETECT,gm,a,b,c,d,x,y,w,z,g[4],h[4],i[4],o,p;
    initgraph(&gd,&gm,"");
    printf("enter the codinate of window");
    scanf("%d%d%d%d",&a,&b,&c,&d);
    rectangle(a,b,c,d);
    printf("enter the coodinate of line");
    scanf("%d%d%d%d",&x,&y,&z,&w);
    line(x,y,z,w);
    if(x<a)
    {
        g[3]=1;
        g[2]=0;
    }
    else
    {
        g[3]=0;
        if(x>c)
        {
            g[2]=1;
        }
    }
    if(y<d)
    {
        g[1]=1;
        g[0]=0;
    }
    else
    {
        g[1]=0;
        if(y>b)
        {
            g[0]=1;
        }
    }
}
```

```
}
printf("value of bits%d%d%d%d",g[0],g[1],g[2],g[3]);
h[0]=g[0];
h[1]=g[1];
h[2]=g[2];
h[3]=g[3] ;
if(z<a)
{
    g[3]=1;
    g[2]=0;
}
else
{
    g[3]=0;
    if(z>c)
    {
        g[2]=1;
    }
}
if(w<d)
{
    g[1]=1;
    g[0]=0;
}
else
{
    g[1]=0;
    if(w>b)
    {
        g[0]=1;
    }
}
printf("value of bits%d%d%d%d",g[0],g[1],g[2],g[3]);
if(g[0]!=0||g[1]!=0||g[2]!=0||g[3]!=0)
{
    if(h[0]!=0||h[1]!=0||h[2]!=0||h[3]!=0)
    {
        i[0]=h[0]&g[0];
        i[1]=h[1]&g[1];
        i[2]=h[2]&g[2];
        i[3]=h[3]&g[3];
        printf("valeur of i%d%d%d%d",i[0],i[1],i[2],i[3]);
    }
    else
    {
        i[0]=h[0]&g[0];
        i[1]=h[1]&g[1];
        i[2]=h[2]&g[2];
        i[3]=h[3]&g[3];
        printf("valeur of i%d%d%d%d",i[0],i[1],i[2],i[3]);
    }
}
else
{

```

```
printf("line not clipped");  
}  
if(i[0]!=0||i[1]!=0||i[2]!=0||i[3]!=0)  
{  
    if(g[0]!=0||g[1]!=0||g[2]!=0||g[3]!=0)  
        if(g[0]==1||g[1]==1)  
            {  
            }  
        }  
    }  
else  
    {printf("line rejected")  
    }  
}  
getch();  
closegraph() ;}
```

OUTPUT OF QUES14



The screenshot shows the output of a C++ program. It displays the coordinates for a window and a line. The window coordinates are (100, 100) for the top-left and (200, 200) for the bottom-right. The line coordinates are (50, 50) for the start and (100, 100) for the end. Below the text, a diagram shows a square window with a line segment inside it. The line segment starts at (50, 50) and ends at (100, 100). The text 'value of bits0101value of bits0100vale of i0100' is also visible at the bottom of the screenshot.



QUES15. Write a C program to check among the following lines which line is accepted or rejected of clipped using Cohen-Sutherland method I. G=1001, H=1000 II. I=0001, J=1000 III. A=0000, B=0000 IV. C=0000, B=0010 V. E=0100, F=0100

```
#include<stdio.h>
#include<graphics.h>
void main()
{
    int gd=DETECT,gm,a,b,c,d,x,y,w,z,g[4],h[4],i[4],o,p;
    initgraph(&gd,&gm,"");
    printf("enter the codinate of window");
    scanf("%d%d%d%d",&a,&b,&c,&d);
    rectangle(a,b,c,d);
    printf("enter the coodinate of line");
    scanf("%d%d%d%d",&x,&y,&z,&w);
    line(x,y,z,w);
    if(x<a)
    {
        g[3]=1;
        g[2]=0;
    }
    else
    {
        g[3]=0;
        if(x>c)
        {
            g[2]=1;
        }
    }
    if(y<d)
    {
        g[1]=1;
        g[0]=0;
    }
    else
    {
        g[1]=0;
        if(y>b)
```

```
{
    g[0]=1;
}
}
printf("value of bits%d%d%d%d",g[0],g[1],g[2],g[3]);
h[0]=g[0];
h[1]=g[1];
h[2]=g[2];
h[3]=g[3] ;
if(z<a)
{
    g[3]=1;
    g[2]=0;
}
else
{
    g[3]=0;
    if(z>c)
    {
        g[2]=1;
    }
}
if(w<d)
{
    g[1]=1;
    g[0]=0;
}
else
{
    g[1]=0;
    if(w>b)
    {
        g[0]=1;
    }
}
printf("value of bits%d%d%d%d",g[0],g[1],g[2],g[3]);
if(g[0]!=0||g[1]!=0||g[2]!=0||g[3]!=0)
{
    if(h[0]!=0||h[1]!=0||h[2]!=0||h[3]!=0)
    {
        i[0]=h[0]&g[0];
        i[1]=h[1]&g[1];
        i[2]=h[2]&g[2];
        i[3]=h[3]&g[3];
        printf("valeur of i%d%d%d%d",i[0],i[1],i[2],i[3]);
    }
    else
    {
        i[0]=h[0]&g[0];
        i[1]=h[1]&g[1];
        i[2]=h[2]&g[2];
        i[3]=h[3]&g[3];
        printf("valeur of i%d%d%d%d",i[0],i[1],i[2],i[3]);
    }
}
```

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```
    }  
    else  
    {  
                                printf("line not clipped");  
    }  
    if(i[0]!=0||i[1]!=0||i[2]!=0||i[3]!=0)  
    {  
        if(g[0]!=0||g[1]!=0||g[2]!=0||g[3]!=0)  
if(g[0]==1||g[1]==1)  
{  
}  
    }  
    else  
    {printf("line rejected")  
    }  
    getch(); closegraph();  
}
```