

Name: Vinayak Madan Shete

Roll No.: TYCOC303

Div: C Batch: C4

Course Name: PBL3- Computer Graphics & Gaming

Course Code: BCE5504

Problem Definition:

Write C++/Java program to fill the above patterns mentioned in assignment 1(House) with desired color using Seed fill algorithm

Input:

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

void flood(int x,int y,int fillColor,
int bgColor)
{
    if(getpixel(x,y)==bgColor)
    {
        putpixel(x,y,fillColor);
        flood(x+1,y,fillColor,bgColor);
        flood(x-1,y,fillColor,bgColor);
        flood(x,y+1,fillColor,bgColor);
        flood(x,y-1,fillColor,bgColor);
    }
}

//void boundaryFill(int x, int y, int
fill_color,int boundary_color)
//{

//    if(getpixel(x, y) !=
boundary_color &&
//        getpixel(x, y) != fill_color)
//    {
//        putpixel(x, y, fill_color);
//        boundaryFill(x + 1, y,
fill_color, boundary_color);
//        boundaryFill(x, y + 1,
fill_color, boundary_color);
//        boundaryFill(x - 1, y,
fill_color, boundary_color);
//        boundaryFill(x, y - 1,
fill_color, boundary_color);
//    }
//}

int main()
{
    int gd = DETECT, gm;
    initgraph(&gd, &gm, NULL);

    // triangle
```

```

line(300,100,400,200);
line(300,100,200,200);
line(200,200,400,200);

// side 2 line
line(200,200,200,400);
line(400,200,400,400);

// horizontal last line
line(200,400,400,400);

// door
line(270,300,270,400);
line(330,300,330,400);
line(270,300,330,300);

//circle
circle(300,160,20);

// window
line(330,250,330,270);
line(380,250,380,270);

line(330,250,380,250);
line(330,270,380,270);

line(330,260,380,260);
line(355,250,355,270);

flood(300,110,14,0);

// fill wall
flood(300, 220, 1, 0);

delay(500000);
closegraph();
return 0;
}

```

Output:

