

(RCA-551) Computer Graphics & Animation
ASSIGNMENT

Write a program to implement Point Clipping

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

void main()
{
    int gm,gr,xcmin,ycmin,xcmax,ycmax,x,y,c;
    clrscr();
    detectgraph(&gm,&gr);
    initgraph(&gm,&gr,"C:\\\\TURBOC3\\\\BGI");
    printf("Enter the clipmin coordinate :\n");
    scanf("%d%d",&xcmin,&ycmin);
    printf("Enter the clipmax coordinate :\n");
    scanf("%d%d",&xcmax,&ycmax);
    rectangle(xcmin,ycmax,xcmax,ycmin);
    printf("Enter the coordinate of the point:\n");
    scanf("%d%d",&x,&y);
    detectgraph(&gm,&gr);
    initgraph(&gm,&gr,"C:\\\\TURBOC3\\\\BGI");
    putpixel(x,y,15);
    printf("\n1.Point clipping\n2.Exit\nEnter your choice:\n");
    scanf("%d",&c);
    switch(c)
    {
        case 1:
            detectgraph(&gm,&gr);
            initgraph(&gm,&gr,"C:\\\\TURBOC3\\\\BGI");
            rectangle(xcmin,ycmax,xcmax,ycmin);
            printf("*****POINT CLIPPING*****\n");
            if((xcmin<x) && (x<xcmax))
            {
                if((ycmin<y) && (y<ycmax))
                {
                    printf("The point is inside the clip window\n");
                    putpixel(x,y,15);
                }
            }
            else
                printf("The point is outside the clipwindow \nThe point is clipped\n");
            break;
        case 2:
            exit(0);
    }
    getch();
}
```

