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Course ⇒ BCA VI^th sem

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section ⇒ B

Nikhil

Q Algorithm:

Step 1:- Start

Step 2: Initialize the value of seed point (x, y, old, new_col).

Step 3:- Define the boundary values:

Step 4: Check if the current seed point is of default color, then repeat the steps 4 and 5 till the boundary pixels reached.

if (current == old)

Step 5: Recursively following the below procedure.

floodfill (x, y, fill_color, old_color: integer)

check whether getpixel (x, y) = old_color then

setpixel (x, y, fill_color);

fill (x+1, y, fill_color, old_color);

fill (x+1, y, fill_color, old_color);

fill (x, y+1, fill_color, old_color);

fill (x, y-1, fill_color, old_color);

Step 6:- Stop.

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Program :-

```
#include<stdio.h>
#include<graphics.h>
#include<conio.h>
void floodfill(int x, int y, int old, int new_col)
{
    int current;
    current = getpixel(x,y);
    if(current == old)
    {
        delay(5);
        putpixel(x,y,new_col);
        floodfill(x+1,y,old,new_col);
        floodfill(x-1,y,old,new_col);
        floodfill(x,y+1,old,new_col);
        floodfill(x,y-1,old,new_col);
        floodfill(x+1,y+1,old,new_col);
        floodfill(x-1,y+1,old,new_col);
        floodfill(x+1,y-1,old,new_col);
        floodfill(x-1,y-1,old,new_col);
    }
}
```

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```
void main()
{
  int gd=DETECT, gm;
  initgraph(&gd,&gm,"");
  rectangle(50,50,150,150);
  floodfill(70,70,0,1);
  getch();
  closegraph();
}
```