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COURSE - BCA 6 B

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SUBJECT - COMPUTER GRAPHICS

Code -

(P1)

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

void floodfill (int x, int y, int old, int newcol)
{
    int curnt;
    curnt = getpixel (x,y);
    if (curnt = old)
    { delay(10);
      putpixel (x, y, newcol);
      floodfill ( x+1, y, old, newcol);
      floodfill ( x-1, y, old, newcol);
      floodfill ( x, y+1, old, newcol);
      floodfill (x, y-1, old, newcol);
      floodfill ( x+1, y+1, old, newcol);
      floodfill ( x-1, y+1, old, newcol);
      floodfill (x+1, y-1, old, newcol);
      floodfill ( x-1, y-1, old, newcol);
    }
}
```

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```
void main()
{
    int gd=DETECT, gm;
    initgraph(&gd, &gm, "");
    rectangle(50, 50, 200, 200);
    floodfill(70, 70, 0, 15);
    getch();
    closegraph();
}
```

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Algo

floodfill (x, y, newcolor, oldcolor)

1) If x or y is outside the screen then return x.
2) If color of getpixel (x, y) is same as old colour then return.
3) Recur for top, bottom, right, left

```
floodfill (x, y, oldcolor, newcolor)
floodfill (x+1, y, oldc, newc)
floodfill (x-1, y, oldcolor, newcolor)
floodfill (x, y-1, oldcolor, newcolor)
floodfill (x, y+1, oldcolor, newcolor)
floodfill (x+1, y+1, oldcolor, newcolor)
floodfill (x-1, y+1, oldcolor, newcolor)
floodfill (x+1, y-1, oldcolor, newcolor)
floodfill (x-1, y-1, oldcolor, newcolor)
```