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1. #include <stdio.h>
#include <graphics.h>
#include <dos.h>
#include <conio.h>
void floodfill (int x, int y, int old,
               int newcol)

```

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{

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    int current;

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    current = getpixel (x, y);

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    if (current == old)

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    {

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        delay (5);

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        putpixel (x, y, newcol);

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        floodfill (x+1, y, old, newcol);

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        floodfill (x-1, y, old, newcol);

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        floodfill (x, y+1, old, newcol);

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        floodfill (x, y-1, old, newcol);

```

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        floodfill (x+1, y+1, old, newcol);

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        floodfill (x-1, y+1, old, newcol);

```

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        floodfill (x+1, y-1, old, newcol);

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        floodfill (x-1, y-1, old, newcol);

```

```

    }

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}

void main()

{

int gcl = DETECT, gm;

initgraph(&gcl, &gm, "C:\\TURBOC3\\BIN\\");

rectangle(50, 50, 150, 150);

fill(70, 70, 0, 15);

getch();

closegraph();

}

Ans.

at Algorithm

floodfill( $x, y$ , oldcolor, newcolor)(1) If  $x$  or  $y$  is outside the screen,  
then return(2) If color of  $\text{getpixel}(x, y)$  is same as  
old color then

(3) Recur for

floodfill( $x, y$ , oldcolor, newcolor)floodfill( $x+1, y$ , oldcolor, newcolor)floodfill( $x-1, y$ , 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).

