

Algorithm for flood fill function:

step 1 : ~~delete~~ start

step 2 : declare variable current

step 3 : call the predefined function $getpixel(x, y)$ and store in variable current.

step 4 : if current == old

• delay by 5

• put the pixel

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);

}

step 5 : stop

Algorithm for program

- Step 1 : start
- Step 2 : ~~end~~ ^{define} the flood fill function
- Step 3 : declared variable gd , gm
- Step 4 : draw the rectangle with predefined function.
- Step 5 : call the flood fill function with required coordinate
- Step 6 : stop

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Program:

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

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

```
#include
```

```
void floodfill(int x, int y, int old, int newcol)  
{
```

```
    int current;
```

```
    current = getpixel(x, y);
```

```
    if (current == old)
```

```
    {
```

```
        delay(5)
```

```
        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);
```

```
    }
```

```
void main()
```

```
{
```

```
    int gd = DETECT, gm;
```

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```
initgraph(2gd, 2gm, " ");  
rectangle(50, 50, 150, 150);  
floodfill(70, 70, 0, 15)
```

```
getch();
```

```
closegraph();
```

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