

### Flood Fill Algorithm

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1. #include <stdio.h>
2. #include <conio.h>
3. #include <graphics.h>

4. // Function to implement Flood Fill Algorithm

5. void flood_fill(int x, int y, int new_color, int old_color)
6. {
7. if (getpixel(x, y) == old_color)
8.     {
9.         a. {
10.            b. putpixel(x, y, new_color); // Fill the pixel
11.            c. flood_fill(x + 1, y, new_color, old_color); // East
12.            d. flood_fill(x - 1, y, new_color, old_color); // West
13.            e. flood_fill(x, y + 1, new_color, old_color); // South
14.            f. flood_fill(x, y - 1, new_color, old_color); // North
15.            g. delay(50);
16.        }
17.    }

18. int main()
19. {
20.     int gd = DETECT, gm;

21.     int x = 250, y = 200, radius = 10;

22.     int new_color=RED, old_color=0;

23.     initgraph(&gd, &gm, "C:\\\\Turboc3\\\\BGI"); // Initialize
        graphics mode

24.     circle(x, y, radius);
25.     delay(1000);
26.     // Call boundary fill algorithm
27.     flood_fill(x, y, new_color, old_color);
28.     getch(); // Wait for a key press

29.     closegraph(); // Close the graphics mode
30.     return 0;
31. }
```