

1. // Boundary Fill algorithm implemented in C.

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

5. // Function to implement Boundary Fill Algorithm
6. void boundary_fill(int x, int y, int fill_color, int
   boundary_color) {
7. if (getpixel(x, y) != boundary_color && getpixel(x, y) !=
   fill_color) {
   a. putpixel(x, y, fill_color); // Fill the pixel
   b. boundary_fill(x + 1, y, fill_color, boundary_color); // East
   c. boundary_fill(x - 1, y, fill_color, boundary_color); // West
   d. boundary_fill(x, y + 1, fill_color, boundary_color); // South
   e. boundary_fill(x, y - 1, fill_color, boundary_color); // North
   f. delay(500);
8. }
9. }

10. int main() {
11. int gd = DETECT, gm;
12. //int x, y;
13. int x = 250, y = 200, radius = 10;

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

15. setcolor(WHITE) ;
16. circle(x, y, radius);

17. // Call boundary fill algorithm
18. boundary_fill(x, y, YELLOW, WHITE); // Fill with YELLOW,
   bounded by WHITE
19. getch(); // Wait for a key press

20. closegraph(); // Close the graphics mode
21. return 0;
22. }
```