Expirenment no. 3: FLOOD FILL

CODE:

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

void flood(int x, int y, int fc, int dc)
{
  if (getpixel(x, y) == dc && getpixel(x, y) != fc)
  {
    putpixel(x, y, fc);
    flood(x + 1, y, fc, dc);
    delay(10);
    flood(x - 1, y, fc, dc);
    delay(10);
    flood(x, y + 1, fc, dc);
    delay(10);
    flood(x, y - 1, fc, dc);
    delay(10);
    //  flood(x+1,y+1,fc,dc);
    //  flood(x+1,y-1,fc,dc);
    //  flood(x-1,y+1,fc,dc);
    //  flood(x-1,y-1,fc,dc);
  }
}

void main()
```

```c
{
    int xc, yc, r, l, b, l1, l2, b1, b2;
    int gm = 0, gd = DETECT;
    initgraph(&gd, &gm, "C:\\TURBOC3\\BGI"); //Paste your BGI path here
    printf("\nEnter center coordinates: ");
    scanf("%d%d", &xc, &yc);
    printf("\nEnter radius: ");
    scanf("%d", &r);
    printf("\nEnter length coordinates: ");
    scanf("%d%d", &l1, &l2);
    printf("Enter breadth coordinates: ");
    scanf("%d%d", &b1, &b2);
    rectangle(l1, l2, b1, b2);
    circle(xc, yc, r);
    flood(xc, yc, 6, 0);
    l = (l1 + l2) / 4;
    b = (b1 + b2) / 4;
    flood(l, b, 6, 0);
    getch();
}
```

OUTPUT:

Enter center coordinates: 300
300

Enter radius: 100

Enter length coordinates: 100
150
Enter breadth coordinates: 100
150