



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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Experiment 1

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Branch: B.E. CSE III Yr

Section: 22BCS-IOT-612-B

Semester: 6th

Subject Name: Computer Graphics with Lab

Subject Code: 22CSH-352

1. Aim: Demonstrate the use of graphics.h functions to draw basic shapes like lines, triangles, and circles.

2. Objective: To familiarize students with using the graphics.h library to create basic shapes like lines, triangles, and circles.

3. Code:

```
#include <stdio.h>
#include <conio.h>
#include <graphics.h>
int main()
{   int gd = DETECT, gm;
    initgraph(&gd, &gm, (char *)"C:\\TURBOC3\\BGI");
    setbkcolor(7);

    // title and line top
    setcolor(15); // color for text
    outtextxy(10, 10, (char *)"Name: Gaganjot Singh | Roll No:
22BCS14843"); // Your title text

    // line below title
    setcolor(15); // color for line
    line(0, 30, getmaxx(), 30);

    // circle
    circle(100, 100, 50);
    outtextxy(75, 98, (char *)"Circle");

    // Drawing a rectangle
    rectangle(210, 60, 400, 140);
    outtextxy(270, 100, (char *)"Rectangle");
```

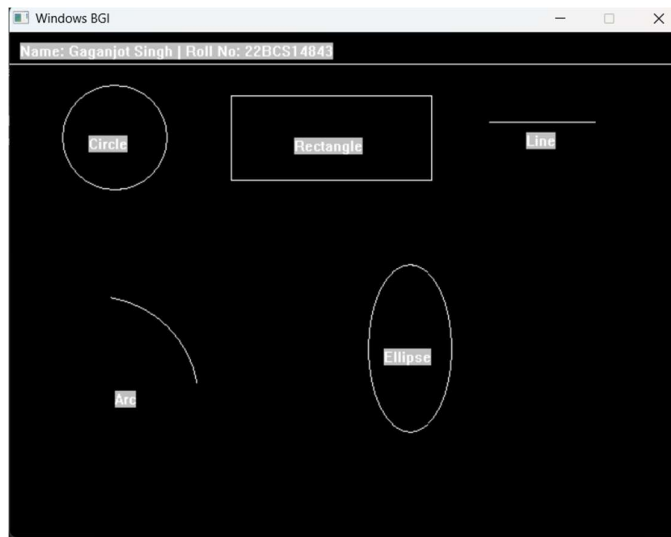
```
// Drawing a line
line(455, 85, 555, 85);
outtextxy(490, 95, (char *)"Line");

// Drawing an arc
arc(80, 350, 10, 80, 100);
outtextxy(100, 340, (char *)"Arc");

// Drawing an ellipse
ellipse(380, 300, 0, 360, 40, 80);
outtextxy(355, 300, (char *)"Ellipse");

getch(); // Wait for user input
closegraph(); // Close the graphics mode
return 0;}
```

4. Output:



5. Learning Outcome:

- Learnt to effectively initialize and terminate graphics mode in C++ programs.
- Gain proficiency in drawing fundamental shapes such as lines, circles, rectangles, arcs, and ellipses using the graphics.h library.
- Developed the ability to precisely position these shapes within the graphics window.
- Learnt how to display text within the graphics window using the `outtextxy()` function.
- Explore techniques for positioning text relative to drawn shapes (e.g., inside, outside, above).



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