

Roll No.:

Name:

Submission time:

1. Create a folder (directory) **LABT1A** in your home directory.
2. Create a C program file **Yroll.c** in the folder **LABT1A**, where roll stands for last four digits of your roll number. For example, if your roll number is 181104, then file name should be Y1104.c
3. The C program **Yroll.c** implements the following:
 - (a) It reads (from the keyboard) coordinates of vertices A, B and C of a triangle ABC in 2D.
 - (b) It checks whether the triangle is valid or not. In case of invalid triangle, the program terminates with an appropriate message.
 - (c) In case of valid triangle, it prints out the area of the triangle in exponential format using two decimal places. [The area of a triangle with sides a, b, c is $\sqrt{s(s-a)(s-b)(s-c)}$ where $s = \frac{a+b+c}{2}$.]

Test data and expected output for two different runs:

```
Enter coordinates of A :0 0
Enter coordinates of B :3 0
Enter coordinates of C :0 4
The area of the tringle is 6.00
```

```
Enter coordinates of A :0 0
Enter coordinates of B :2 0
Enter coordinates of C :5 0
Triangle is not valid
```

Write the following commands in the terminal and write down the output against it.

1. pwd

Output:

2. ls

Output:

3. ./a.out [with input data A(1.1, 2.2), B(3.3, 4.4), C(5.25, 6.5)]

Output:

Finally, upload Yroll.c using the link sent to your email.