Common instruction for all three problems:

- Handwritten solution will not be allowed. You need to code.

-Partial marking is available. So try to perform as much as you can.

Problem 1.

You are given three sides of a triangle. Write a program to check whether it is a right-angled triangle. If yes, then calculate the area of that triangle.

Sample Input:

1st side: 4

2nd side: 3

3rd side: 5

Output:

Right-angled: Yes
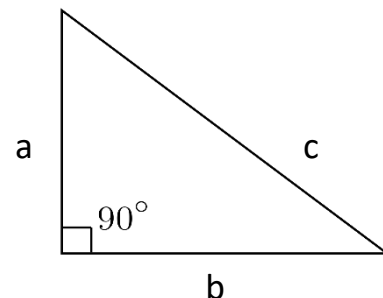
Area: 6

Hint:

A right-angled triangle satisfies Pythagorean formula:

$a^2 + b^2 = c^2$

Formula for Area = ½ *a*b

Problem 2.

You are given three fractional number as input. At first convert them into integers using the ***floor*** function of "*math.h*". Then find the **second largest** number among these three integers.

1st number: 24.77

2nd number: 19.28

3rd number: 42.75

Output: 24

Problem 3.

You are given a **three-digit** Octal number as input. Write a program to convert it into decimal.

Sample input: 347

Output: 231

Hint: Technique of converting an octal number to decimal is as follows:

For $(347)_8$ →

$3*8^2 + 4*8^1 + 7*8^0 = 192+32+7 = (231)_{10}$

Do you remember how we extracted digits from a number in our lab class using modulo operator? 😉

Problem no.	Points
1	10
2	10
3	10