

## Session 4

**Assignment 1 Question** 

# Session 4: Assignment 1

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#### 1. Introduction

This assignment will help you to consolidate the concepts learnt in the session.

#### 2. Problem Statement

1.1 Write a Python Program(with class concepts) to find the area of the triangle using the below formula.

area = 
$$(s*(s-a)*(s-b)*(s-c)) ** 0.5$$

Function to take the length of the sides of triangle from user should be defined in the parent class and function to calculate the area should be defined in subclass.

- 1.2 Write a function filter\_long\_words() that takes a list of words and an integer n and returns the list of words that are longer than n.
- 2.1 Write a Python program using function concept that maps list of words into a list of integers representing the lengths of the corresponding words.

**Hint:** If a list [ab,cde,erty] is passed on to the python function output should come as [2,3,4]

Here 2,3 and 4 are the lengths of the words in the list.

2.2 Write a Python function which takes a character (i.e. a string of length 1) and returns True if it is a vowel, False otherwise.

NOTE: The solution shared through Github should contain the source code used and the screenshot of the output.

### 3. Output

N/A