ASSIGNMENT-5

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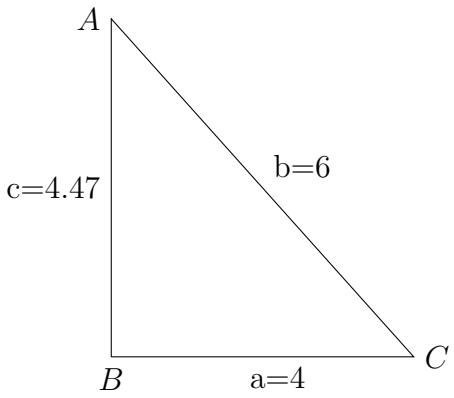
1 Construct right angled $\triangle$ whose hypotenuse is 6 and one of the legs is 4.

1.1 Solution:-

Given, Hypotenuse=6 , Side=4
Let the triangle be ΔABC with $\angle$B=90° AC=b=6,BC=a=4
Using Pythagoras Theorem:
$AC^2=BC^2+AB^2$
$b^2=a^2+c^2$
c=4.47



ΔABC is required triangle.

1.2 Output of Python code:

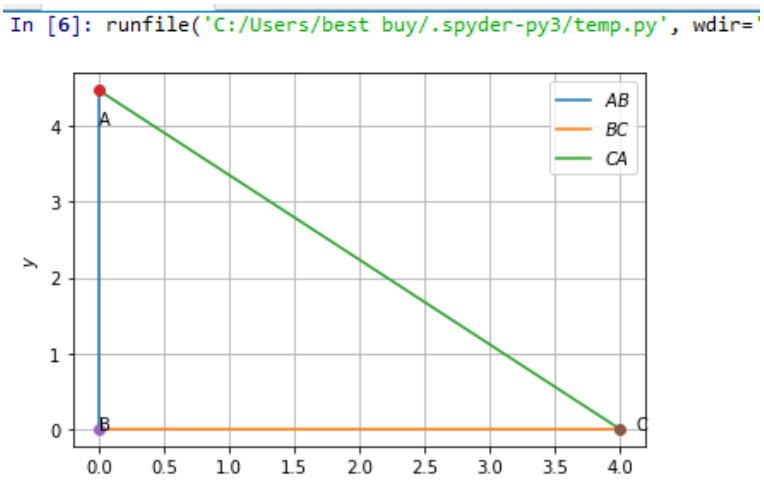
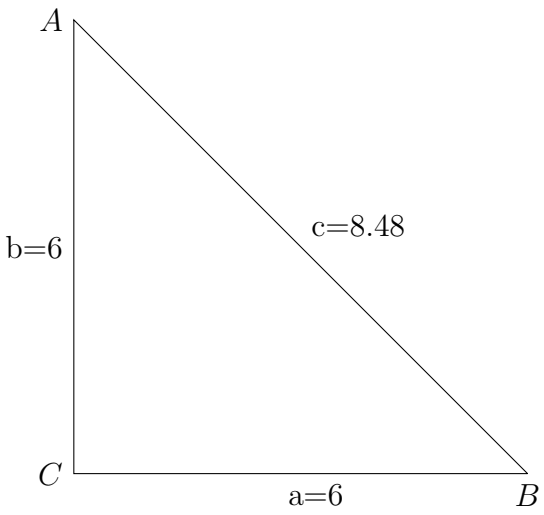


Figure 1: Fig generated using python

2 Construct an isosceles right angled ΔABC right angled at C such AC = 6.

2.1 Solution:-

Given ΔABC isosceles right angled Δ at C such that AC=b=6, therefore , BC=a=6
Thus using Pyth. Theorem:
AB^2=BC^2+AC^2
c^2=a^2+b^2
c=8.48



ΔABC is required triangle.

2.2 Output of Python code:-

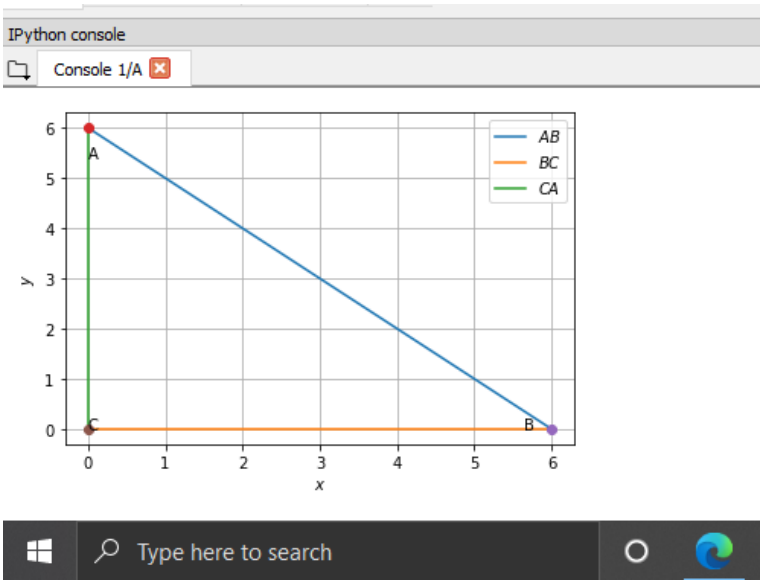


Figure 2: Fig generated using python