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|  | <p style="text-align: center;"><b>Department of Information Technology</b><br/> <b>College of Engineering and Management, Kolaghat</b><br/> <b>IT Workshop Lab (PCC-CS 393) using Python</b></p> | <p style="text-align: center;"><b>Version 1.0</b></p> |
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## Assignment-01 (Assignment on basic programming)

1. Write a python program to perform addition, subtraction, multiplication, integer division, floating-point division, modulo division, and exponentiation of two integers taking input from the user at the run time
2. Write a Python program that accepts the user's first and last name separately and prints them in reverse order with a space between them.
3. Program to calculate the area of a triangle:
  - (a) Given the Base and height of the triangle. Take input from the user.
  - (b) Given Three sides of a triangle (Make sure that it forms a triangle). Take input from the user using single input( ).
4. Write a python program to find out the distance between two points in the cartesian coordinate system. [each point (x,y) coordinate should be read with a single input( ) function]
5. Write a Python program that accepts a circle's radius from the user and computes the area.
6. Write a Python program to compute the volume of a sphere with a radius taken from the user.
7. Write a python program to calculate the height and weight (provided in feet-inch and lbs) of a person in cms and Kgs respectively, [1 feet=12 inch and 1 inch=2.54 cm, 1 lbs=0.45359 kg]
8. Write a python program to find out the equivalent temperature in Fahrenheit where users provide temperature in centigrade.
8. Write a python program that determines the distance to lightning strikes based on the time elapsed between the flash and the sound of thunder. The speed of sound is approximately 343 m/s and the speed of light is 299792458 m/s.
9. A coffee shop sells coffee at Rs. 3000/- a Kg plus the cost of shipping. Each order ships for Rs. 35/- per Kg plus Rs 75/- fixed cost for overhead. Write a Python program that calculates the cost of an order. The input of the program is the amount of coffee to be shipped.

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10. Write down a program in Python to determine the length of the ladder required to reach a given height when leaning against a house. The height and angle of the ladder are given as input. To compute you may have to convert the angle from degree to radian.

11. Write a Python program to display the current date and time.  
#Sample Output : # Current date and time : 2020-09-25 14:34:14  
[ Hints: from datetime import datetime  
now = datetime.now() ]

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To compute square root use **import math** at the beginning of the program and then compute like this **val=math.sqrt(15)**

To compute the absolute value of an expression use **abs(math expression)**