

Lab Week 1:

1. Write a python program to find the area and circumference of a circle (radius r as input)
(Formula **area** = πr^2 · **Circumference** = $2 \pi r$)
2. Write a Python Program to find the area and circumference of a rectangle (input length and width) Formula: **area** = lw (where l is the length and W is the width)
Formula: **Circumference** = $2 * (l + W)$
3. Write a Python Program to find area of the triangle (formula **area** = $1/2 * \text{base} * \text{height}$.)
4. Write a Python program that calculates and prints the value according to the given formula: **Q = Square root of $[(2 * C * D)/H]$** . Following are the fixed values of C and H : C is 50. H is 30. D is the variable whose values should be input to your program.
Example: Let us assume the following input is given to the program: 100. The output of the program should be:18
5. Write a Python Program to calculate Simple Interest and Compound Interest
6. Write a python Program to Convert Celsius to Fahrenheit and vice versa
7. Compute the growth of money in a bank. Let p be a bank's interest rate in percent per year. An initial amount A has then grown to
$$A \left(1 + \frac{p}{100}\right)^n$$
 after n years. Make a program for computing how much money 100000 Rupees have grown to after three years with 5 percent interest rate.