

# Lab Assignment-0 (Basics)

Students are instructed to practice all the exercises independently.

Organize your work by creating a folder named 'Assignment 0' and store all the source code within it. Please bring this folder with you to share your progress with your lab teacher. Printing or submitting a hard copy is not required.

1. WAP that will print your name.
2. WAP that will print your name, your father and mother name in three separate lines.
3. WAP that will print the sum of two variables **a** and **b**; where  $a = 10$  and  $b = 20$ .
4. WAP to calculate sum of two integer numbers (given by the user) and print it.
5. WAP that will take three numbers find their average. where  $a = 10$ ,  $b = 10$  and  $c = 11$
6. WAP that will take three integer as input from user and print their average.  
(You should use type-cast to get proper result)
7. WAP to calculate summation, subtraction, division, multiplication, reminder operation and average of two integer number.
8. WAP to convert Km value into meter value. [1km=1000m]
9. WAP to convert GB value into bit value.
10. WAP to convert Celsius value into Fahrenheit value. (Formula :  $F = \frac{9C}{5} + 32$ )
11. WAP to calculate Mass of the Massive particle (e.g. globe). [Formula:  $M = \frac{R^2}{G}$ ]
12. WAP to calculate the area of a circumference. [Formula:  $\text{circumference} = 2 * \pi * r$ ]
13. WAP to calculate the area of a circle. [Formula:  $\text{Area} = \pi * r^2$ ]
14. WAP to calculate the volume of a Globe. [Formula:  $\text{Volume} = \frac{4}{3} * \pi * r^3$ ]
15. WAP to calculate the circumference of a rectangle. [Formula:  $\text{Area} = 2 * (a + b)$ ]
16. WAP to calculate the area of a rectangle. [Formula:  $\text{Area} = a * b$ ]
17. WAP to calculate the volume of a rectangle cube. [Formula:  $\text{Volume} = a * b * c$ ]
18. WAP to calculate the area of a square. [Formula:  $\text{Area} = a^2$ ]
17. WAP to calculate the volume of a cube. [Formula:  $\text{volume} = a^3$ ]
20. WAP to calculate the area of a triangle. [Formula:  $\text{Area} = \frac{1}{2} * \text{base} * \text{height}$ ]
21. WAP to calculate the hypotenuse of a right-angle. [Formula:  $\text{height}^2 + \text{base}^2 = \text{hypotenuse}^2$ ]
22. WAP to calculate the base<sup>2</sup> of a right-angle. [Formula:  $\text{base}^2 = \text{hypotenuse}^2 - \text{height}^2$ ]
23. WAP to calculate the area of a circle. [Formula:  $\text{Area} = \pi * r^2$ ]
24. WAP to calculate the initial velocity of a moving particle. [hint:  $v = u + a * t \dots$ ]
25. WAP to interchange values of two numbers using third variable.
26. WAP to interchange values of two numbers without using third variable.

27. WAP to input two numbers and print their quotient and remainder.
28. WAP to accept any character from user and display its ASCII number on screen.
29. WAP to input any ASCII number and display appropriate character on screen.
30. WAP to input any Capital letter and display it with small letter.
31. WAP to input any Small letter and display it with capital letter.
32. WAP to input any Capital letter and display it with small letter. (without using tolower() function)
33. WAP to input any Small letter and display it with capital letter. (without using toupper() function)
34. WAP to input the number the days from the user and convert it into years, months and days.
35. WAP to input three digits number from user and calculate sum of first and last numbers. (Hint : I/p : 358 O/p :11)
36. WAP to input three digits number from user and display square of first and last numbers.(Hint : I/p : 358 O/p : Square of 3 is 9 and Square of 8 is 64)
37. WAP to input two digits number from user and display with reverse number on screen (Hint : I/P : 32 O/P : 23)
38. WAP to find out the quotient and remainder of two numbers. (Without using modulus ( % ) operator)

**\* WAP = Write a Program**