

# GOVERNMENT COLLEGE UNIVERSITY, LHR

## Practice Assignment

Sem :2

Subject : Programming Fundamentals

### Attempt all questions:

1. Find square/cube of a number
2. Find sum/difference/product/division of two/three numbers
3. Find average of two numbers
4. Calculate area of a rectangle (  $\text{area} = \text{base} * \text{height}$  )
5. Calculate marks percentage (  $\text{marks percentage} = \text{marks obtained} / \text{total} * 100$  )
6. Calculate sales tax (  $\text{tax} = \text{amount} * \text{tax percentage} / 100$  )
7. Find whether a numbers is negative or not
8. Find whether two numbers are equal or not
9. Multiply two numbers if their difference is greater than 0
10. Find whether the sum of two numbers is greater than 50
11. Write a program that converts temperature from Celsius to Fahrenheit. Prompt the user to enter a temperature in Celsius and display the equivalent temperature in Fahrenheit. Use the formula:  $F = (C * 9/5) + 32$ .
12. Write a program that calculates the area and circumference of a circle. Prompt the user to enter the radius of the circle and display the calculated area and circumference. Use the formulas:  $\text{Area} = \pi * r^2$ ,  $\text{Circumference} = 2 * \pi * r$ .
13. Declare a constant named "PI" and assign it the value 3.14159. Use this constant to calculate the area of a circle with a given radius (prompted from the user). Display the calculated area.
14. Write a program that calculates the simple interest. Prompt the user to enter the principal amount, the rate of interest, and the time period (in years). Calculate the simple interest using the formula:  $\text{Simple Interest} = (\text{Principal} * \text{Rate} * \text{Time}) / 100$ . Display the calculated simple interest.

\*\*\*\*\*Good Luck\*\*\*\*\*