# TY CSE AY-2025-26 Sem-I

# Sub: Cutting Edge Technologies Lab (7CS352)

## Assignment No 3

**Due date- 12/08/2025**

**(String and Functions)**

1. Declare two variables: name = "Alice" and age = 25.

Print a sentence using string interpolation: Expected Output: "Alice is 25 years old."
2. Declare two numbers: num1 = 10 and num2 = 5.

Print "The sum of 10 and 5 is 15" using string interpolation.
3. Declare a string variable and find its length. Print the result.

4. Take a string, convert it to uppercase and lowercase, and print both results.

5. Declare a string and check if it is empty. Print "String is empty" if true; otherwise, print "String is not empty".

6. Given two string variables, concatenate them using the + operator and print the result.

7. Given word = "SwiftLanguage", check if it starts with "Swift" and print true or false.

8. Given website = "www.example.com", extract the domain extension (".com") using suffix.

9. Given text = "The quick brown fox", check if "brown" is present. Print true or false.

10. Given str1 = "Hello" and str2 = "hello", check if they are equal (case-sensitive) and print the result.

11. Given str1 = "Hello" and str2 = "hello", check if they are equal ignoring case and print the result.

12. Write a function isWeekend () that returns true if today is Saturday or Sunday, otherwise false.

13. Check if a Number is Even or Odd, write a function isEven (number: Int) -> Bool that returns true if the number is even, otherwise false.

14. Write a function celsiusToFahrenheit (celsius: Double) -> Double that converts Celsius to Fahrenheit using the formula F = C * 9/5 + 32.

15. Calculate Power of a Number, write a function power (base: Int, exponent: Int = 2) -> Int that returns the result of base^exponent, where exponent defaults to 2.

16. Write a function calculateArea (of length: Double, and width: Double) -> Double that returns the area of a rectangle when called as calculateArea (of: 10, and: 5).

17. Write a function greet (person name: String) that prints "Hello, <name>!" when called as greet (person: "Alice").

18. Write a function repeatMessage (_ message: String, _ times: Int) that prints the message multiple times when called as repeatMessage ("Swift", 3).

19. Write a function maxOfTwo (a: Int, b: Int) -> Int that returns the larger of the two numbers.
Example: maxOfTwo (a: 8, b: 12) → Output: 12

20. Calculate the Factorial of a Number

Write a function factorial (n: Int) -> Int that returns the factorial of n.
Example: factorial (n: 5) → Output: 120

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