## Assignment 02

#### Variables



- 1. Write a program that swaps the values of two variables.
- 2. Write a program that calculates the area of a rectangle given its length and width.
- 3. Write a program that converts temperature from Fahrenheit to Celsius.
- 4. Write a program that calculates the volume of a sphere given its radius.
- 5. Write a program that finds the average of three numbers.

1

## Assignment 02

#### If-elif-else



- 6. Write a program that determines if a number is even or odd.
- 7. Write a program that finds the maximum of three numbers.
- 8. Write a program that determines if a year is a leap year or not.
- 9. Write a program that determines if a number is positive, negative, or zero.
- 10. Write a program that calculates the grade based on a given percentage.

2

## Assignment 02

### For Loop



- 11. Write a program that prints the first `n` natural numbers.
- 12. Write a program that calculates the factorial of a number.
- 13. Write a program that generates a Fibonacci sequence of length `n`.
- 14. Write a program that checks if a given number is prime or not.
- 15. Write a program that prints the multiplication table of a given number.

3

# Assignment 02 While Loop



- 16. Write a program that finds the sum of all even numbers between 1 and `n`.
- 17. Write a program that reverses a given number.
- 18. Write a program that checks if a given string, is a palindrome.
- 19. Write a program that generates a random number and allows the user to guess it.
- 20. Write a program that finds the greatest common divisor (GCD) of two numbers.

Submission Guidelines: Upload the code in GitHub and submit the GitHub repository link.

How to Upload? Here are GitHub Tutorials