### 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.

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## 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.

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# 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.

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# 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.

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- 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 <u>GitHub Tutorials</u>

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