

# Assignment\_01

1. Write a Python program to print **"Hello, World!"**.
2. Declare a variable **name** and assign your name to it. Print the value of the variable.
3. Declare variables using **camelCase**, **snake\_case**, and **PascalCase**. Assign values to them and print each variable.
4. Write a Python program that declares a variable and prints its memory address using the **id()** function.
5. Write a Python program that takes user input and prints it.
6. Write a Python program to display the data types of different variables (e.g., integer, float, string).
7. Write a Python program that takes two numbers as input and performs addition and subtraction. Display the results.
8. Write a Python program to demonstrate operator precedence. Use addition, subtraction, multiplication, and division in a single expression and show the result. (5 + 3 \* 2 - 4 / 2)
9. Write a Python program to calculate the area of a rectangle based on user input for its length and width.  
**Hint:** Take input from the user to enter the length of the rectangle.  
Take input from the user to enter the width of the rectangle.  
Area=length×width
10. Write a Python program that performs the following steps:
  - Define a string **vowels** containing all lowercase vowels ('aeiou').
  - Take input from the user to enter a letter (lowercase). Check if the entered letter is 'a' using membership operators (**in** or **not in**). Print **True** if the entered letter is 'a', otherwise, print **False**.