

# Workshop 08

## Beginner Level

### 1. Read a File and Count Characters:

- Write a Python program that opens a file named **input.txt**, reads its content, and prints the total number of characters in the file.

### 2. Write Strings to a File:

- Create a Python script that writes the strings **"Hello"** and **"World"** on two separate lines in a file named **greetings.txt**.

## Intermediate Level

### 3. Line by Line Analysis:

- Given a text file named **data.txt**, write a Python program to read the file line by line and print each line with its corresponding length (number of characters).

### 4. Find and Replace in File:

- Write a Python program that reads a file named **story.txt**, finds all occurrences of the word **"Python"** and replaces them with **"Pythons"**. Save the modified content into a new file called **modified\_story.txt**.

## Advanced Level

### 5. Generating a Summary Report:

- You have a text file **reviews.txt** where each line contains a product review followed by a rating out of 5 (e.g., **This product works well, 4**). Write a Python script to read the file and generate a summary report in a new file **summary.txt** that contains the average rating and the total number of reviews.

### 6. File Content Manipulation:

- Create a Python program that reads a file named **article.txt**, performs the following transformations, and writes the output to a new file called **formatted\_article.txt**:
  - Replace all instances of a specified word with another word provided by the user.
  - Ensure all sentences start with a capital letter.
  - Remove all leading and trailing whitespace from each line.