Lab 5: Frequently Used Methods

Task: Using the sum() Method

Objective

The objective of this task is to demonstrate the use of Python's built-in sum() method to add numerical values in a list. Students will apply it to calculate total power consumption and equivalent resistance in a series circuit.

Task Description

The goal of this task is to use the sum() function to efficiently compute the total of a list of numerical values. Students will calculate the total power consumed by components and the total resistance of resistors connected in series.

Procedure

Created a list containing the power consumed by individual components.

Used sum() to calculate the total power consumed.

Created a list of resistances connected in series.

Used sum() to find the equivalent resistance of the series circuit.

Printed the results to verify correctness.

In [1]:
```
pow_Consumed=[10,20,45,30,11,100]
print(sum(pow_Consumed))
```

```
216
```

In [2]:
```
R=[10,20,30,40,50,60]
R_eq=sum(R)
print(R_eq)
```

```
210
```