



## Lab 9: Loops

### Task: Calculating Power Loss Using Loops

#### Objective

The objective of this task is to practice using Python loops to iterate over a list and perform calculations on each element. Students will calculate the square of current readings to determine power loss.

#### Task Description

The goal of this task is to store current readings in a list and use a loop to calculate the square of each value, which is useful in power loss calculations.

#### Procedure

Created a list of current readings.

Used a loop to iterate through each value in the list.

Calculated the square of each current reading using the formula  $I^2 \Omega^2$ .

Printed the squared values for each reading

```
In [1]: readings=[10,20,30,11,56,2]
for r in readings:
    squ_readings=r*r
    print(squ_readings)
```

```
100
400
900
121
3136
4
```