6. Generators and Iterators

Theory:

• Understanding how generators work in Python.

• Difference between yield and return.

• Understanding iterators and creating custom iterators.

**Generators:** Special functions that produce values one at a time using yield, instead of returning them all at once.

**Yield vs Return:**

* yield: Pauses the function, saves its state, and returns a value.
* return: Ends the function and returns a single value.

**Iterators:** Objects that can be looped over and use \_\_iter\_\_() and \_\_next\_\_() methods to return values one by one.