Chapter 3 - Constructors

Theory:

Constructors initialize object attributes when an object is created.

Code Example:

```
# ■ What is a Constructor in Python?
# A constructor is a special method that automatically runs when you create (instantiate)
an object of a class.
# In Python, the constructor method is named: __init__(self)
# ■ Example 1: Constructor without parameters
class Person1:
def __init__(self):
print("A new person is created!")
# Creating an object
p = Person1() # Output: A new person is created!
# ■ Purpose of __init__():
# - Initialize values for each object
# - Create instance attributes like self.name, self.age, etc.
# ■ Example 2: Constructor with Parameters
class Person2:
def __init__(self, name, age): #dunder method automatically calls
self.name = name # instance attribute
self.age = age # instance attribute
def show(self):
print(f"Name: {self.name}, Age: {self.age}")
# Creating an object with data
p1 = Person2("Milan", 22) # Constructor runs here and sets name = "Milan" and age = 22
p1.show() # Output: Name: Milan, Age: 22
```