

Classes & Objects

What is a Class?

- A **class** is a **blueprint** for creating objects.
- It defines **attributes (variables)** and **methods (functions)**.

Syntax:

```
class ClassName:  
    # attributes + methods
```

What is an Object?

- An **object** is an **instance of a class**.
- We use the class blueprint to create real objects.

Syntax:

```
obj = ClassName()
```

Key Points:

- **Class** → design/blueprint.
- **Object** → real version of class.
- **`__init__` method** → special constructor that runs automatically when an object is created.
- **`self`** → represents the current object.