

Here is the complete, beginner-to-advanced, interview-level guide to Python Classes and OOP concepts — explained clearly with examples.

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## ✓ PYTHON CLASSES — COMPLETE GUIDE (Beginner → Advanced)

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### 1. What is a Class?

A **class** is a blueprint/template for creating objects (instances).

python

Copy code

```
class Student:
    pass
```

### 2. What is an Object?

An **object** is an instance of a class.

python

Copy code

```
s1 = Student()
s2 = Student()
```

### 3. The `__init__` Constructor

Runs automatically when an object is created.

python

Copy code

```
class Student:
    def __init__(self, name, age):
        self.name = name
        self.age = age
```