

# PYTHON OOP CHEAT SHEET

Object Oriented Programming Concepts in Python

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## WHAT IS OOP?

OOP is a programming paradigm based on the concept of objects and data. In OOP, every entity is treated as an object.

## WHAT ARE CLASSES?

A class can be defined as an object's blueprint, description or definition.

We can use the same class as a blueprint for creating multiple different objects. A class consists of variables and methods. A class definition should start with the `__init__` method..

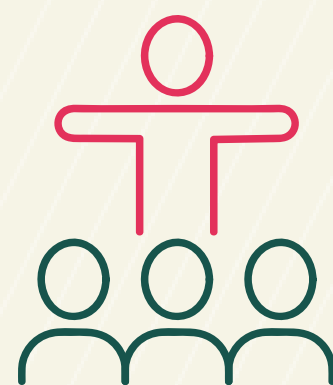


## INHERITANCE

The mechanism of deriving a new class from an old one is called inheritance. The old class is called super class and the new one is called sub class.

## POLYMORPHISM

Polymorphism is the property by which objects belonging to different classes are able to respond to the same message, but in different ways.



## ENCAPSULATION



Encapsulation is used to restrict access to methods and variables. The code and data are enclosed within a single unit, just like a capsule, from being modified by external agents.