Interactive Question for Learn OOP with Python

- Write answer for all question

1. In Python, which keyword is used to define a class?
   a) class
   b) def
   c) object
   d) instance

2. Which of the following is NOT a fundamental principle of OOP?
   a) Inheritance
   b) Encapsulation
   c) Abstraction
   d) Looping

3. What is the primary purpose of the `__init__` method in a Python class?
   a) To create a new object of the class
   b) To initialize instance variables
   c) To define class methods
   d) To perform method overriding

4. Inheritance in Python allows a class to:
   a) Access private variables of another class
   b) Create multiple instances of a class
   c) Share attributes and methods of another class
   d) Define static methods

5. Method overriding in OOP is most closely related to the concept of:
   a) Polymorphism
   b) Encapsulation
   c) Abstraction
   d) Inheritance

6. What is the purpose of encapsulation in OOP?
   a) To prevent inheritance
   b) To hide the internal implementation details of a class
   c) To create abstract classes
   d) To define instance methods

7. In Python, which keyword is used to create an instance of a class?
   a) create
   b) instance
   c) new

d) object

8. A class variable in Python is shared among:
   a) All instances of the class
   b) Only the instances that are initialized with a specific value
   c) Only the instances created by the constructor
   d) Only the instances in the same module

9. What does the `super()` function do in Python?
   a) Creates a new object
   b) Calls the base class constructor
   c) Initializes class variables
   d) Deletes an instance

10. Which of the following is NOT a built-in data type in Python?
    a) int
    b) str
    c) class
    d) list