Java Object-oriented programming

1. What is Object-Oriented Programming (OOP)?

Answer: A paradigm based on objects containing data and behavior.

2. What are the four pillars of OOP?

Answer: Encapsulation, Abstraction, Inheritance, Polymorphism.

3. What is a class in OOP?

Answer: A blueprint for creating objects with properties and methods.

4. What is an object in OOP?

Answer: An instance of a class containing data and behavior.

5. What is encapsulation?

Answer: Bundling data and methods, restricting external access.

6. What is inheritance?

Answer: Deriving new classes from existing ones to reuse code.

7. What is polymorphism?

Answer: Treating objects of different classes as one common type.

8. What is abstraction?

Answer: Hiding complex details, exposing only essential features.

9. What is method overriding?

Answer: Redefining a parent class method in a subclass.

10. What is a constructor?

Answer: A method called to initialize a new object instance.