

Java Intermediate Questions (Class & Object, Constructor, Inheritance, Method Overloading)

Class & Object

1. Write a class named Car with two variables: brand and model. Then create one object of this class in the main() method.
2. What is the difference between a class and an object? Write a simple example.

Constructor

3. Create a class Student with a constructor that sets the name and age of the student. Print these values in the main() method.
4. What is a constructor? How is it different from a normal method?

Inheritance

5. Create a class Animal with a method makeSound(). Then create a class Dog that inherits from Animal and adds a method bark().
6. What is inheritance in Java? Write a small example with two classes.
7. Why do we use inheritance? Give one advantage of using it.

Method Overloading

8. Write a class MathOperations with two methods named add(). One should add two numbers, and one should add three numbers.
9. What is method overloading? Write a simple example to show it.
10. Can two methods have the same name in Java? If yes, what must be different about them?