

# Java model paper-2

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## Java Practice Exam - Set 6 (Advanced Expert Level)

### 1. What will be the output of the following code?

```
java
Copy code
class A {
    void display() {
        System.out.println("Class A");
    }
}

class B extends A {
    void display() {
        System.out.println("Class B");
    }
}

class C extends B {
    void display() {
        System.out.println("Class C");
    }
}

public class Test {
    public static void main(String[] args) {
        A obj = new C();
        obj.display();
    }
}
```

- a) Class A
- b) Class B
- c) Class C
- d) Compilation error

2. **What will the following code print?**

```
java
Copy code
class Outer {
    private int x = 10;

    class Inner {
        void display() {
            System.out.println("Value of x is: " + x);
        }
    }
}

public class Test {
    public static void main(String[] args) {
        Outer.Inner inner = new Outer().new Inner();
        inner.display();
    }
}
```

- a) Value of x is: 10
- b) Compilation error
- c) Value of x is: 0
- d) Runtime error

3. **What will the following code output?**

```

java
Copy code
class Base {
    void show() {
        System.out.println("Base show");
    }
}

class Derived extends Base {
    void show() {
        System.out.println("Derived show");
    }
    void print() {
        show();
    }
}

public class Test {
    public static void main(String[] args) {
        Base b = new Derived();
        b.show();
        ((Derived) b).print();
    }
}

```

- a) Base show, Base show
- b) Base show, Derived show
- c) Derived show, Base show
- d) Derived show, Derived show

4. **What will be the output of the following code snippet?**

```

java
Copy code
class Animal {
    void sound() {
        System.out.println("Animal sound");
    }
}

class Dog extends Animal {
    void sound() {
        System.out.println("Bark");
    }
    void display() {
        System.out.println("Dog class");
    }
}

public class Test {
    public static void main(String[] args) {
        Animal a = new Dog();
        a.sound();
        ((Dog) a).display();
    }
}

```

- a) Animal sound, Dog class
- b) Bark, Dog class
- c) Compilation error
- d) Runtime error

5. Which of the following methods will cause a compilation error?

```

java
Copy code
class Parent {
    private void method() {
        System.out.println("Parent method");
    }
}

class Child extends Parent {
    void method() { // This will cause an error
        System.out.println("Child method");
    }
}

public class Test {
    public static void main(String[] args) {
        Parent p = new Child();
        p.method();
    }
}

```

- a) Parent method
- b) Child method
- c) Compilation error
- d) Runtime error

6. **What will be the result of executing this code?**

```

java
Copy code
class X {
    void method(int x) {
        System.out.println("X method: " + x);
    }
}

```

```

    }
}

class Y extends X {
    void method(double x) {
        System.out.println("Y method: " + x);
    }
}

public class Test {
    public static void main(String[] args) {
        X obj = new Y();
        obj.method(5); // Calls X's method
        obj.method(5.5); // Compilation error
    }
}

```

- a) X method: 5
- b) Y method: 5.5
- c) Compilation error
- d) Runtime error

**7. What does the following code print?**

```

java
Copy code
class A {
    int a = 10;

    A() {
        System.out.println("Constructor A");
    }
}

```

```

class B extends A {
    int b = 20;

    B() {
        super();
        System.out.println("Constructor B");
    }
}

public class Test {
    public static void main(String[] args) {
        B obj = new B();
        System.out.println("a = " + obj.a + ", b = " + ob
j.b);
    }
}

```

- a) Constructor A, Constructor B, a = 10, b = 20
- b) Constructor B, Constructor A, a = 10, b = 20
- c) Constructor A, a = 10, b = 20
- d) Constructor B, a = 10, b = 20

**8. What will be the output of the following code?**

```

java
Copy code
interface InterfaceA {
    void display();
}

interface InterfaceB {
    default void display() {
        System.out.println("InterfaceB display");
    }
}

```

```

}

class Implementor implements InterfaceA, InterfaceB {
    public void display() {
        System.out.println("Implementor display");
    }
}

public class Test {
    public static void main(String[] args) {
        Implementor obj = new Implementor();
        obj.display();
    }
}

```

- a) InterfaceB display
- b) Implementor display
- c) Compilation error
- d) Runtime error

**9. What will happen if you try to instantiate an abstract class directly?**

```

java
Copy code
abstract class AbstractClass {
    abstract void display();
}

public class Test {
    public static void main(String[] args) {
        AbstractClass obj = new AbstractClass(); // Attempt
        to instantiate
    }
}

```



```
}
```

- a) Compilation error
- b) Object created successfully
- c) Runtime error
- d) No output

10. **What will the following code output?**

```
java
Copy code
class A {
    static int count = 0;

    A() {
        count++;
    }
}

public class Test {
    public static void main(String[] args) {
        A a1 = new A();
        A a2 = new A();
        A a3 = new A();
        System.out.println("Count: " + A.count);
    }
}
```

- a) Count: 1
- b) Count: 2
- c) Count: 3
- d) Count: 0

## Java Practice Exam - Set 7 (Extreme Expert Level)

### 1. What is the output of the following code?

```
java
Copy code
class Shape {
    void draw() {
        System.out.println("Drawing Shape");
    }
}

class Circle extends Shape {
    void draw() {
        System.out.println("Drawing Circle");
    }
}

public class Test {
    public static void main(String[] args) {
        Shape s = new Circle();
        s.draw(); // Dynamic method dispatch
    }
}
```

- a) Drawing Shape
- b) Drawing Circle
- c) Compilation error
- d) No output

### 2. Which of the following will compile without error?

```
java
Copy code
class Base {
```

```

        void show() {
            System.out.println("Base show");
        }
    }

    class Derived extends Base {
        void show() {
            System.out.println("Derived show");
        }
    }

    public class Test {
        public static void main(String[] args) {
            Base b = new Derived();
            b.show();
        }
    }

```

- a) Base show
- b) Derived show
- c) Compilation error
- d) No output

**3. What will the following code print?**

```

java
Copy code
class Parent {
    int a = 10;
}

class Child extends Parent {
    int a = 20;
}

```

```

        void print() {
            System.out.println("a = " + a);
        }
    }

    public class Test {
        public static void main(String[] args) {
            Parent p = new Child();
            System.out.println("a = " + p.a);
        }
    }

```

- a) a = 10
- b) a = 20
- c) Compilation error
- d) No output

**4. What will happen when the following code is executed?**

```

java
Copy code
abstract class AbstractExample {
    abstract void method();
}

class ConcreteExample extends AbstractExample {
    void method() {
        System.out.println("Concrete method");
    }
}

public class Test {
    public static void main(String[] args) {
        AbstractExample obj = new ConcreteExample();
    }
}

```

```
        obj.method();
    }
}
```

- a) Compilation error
- b) Concrete method
- c) Runtime error
- d) No output

5. **What will the following code output?**

```
java
Copy code
class Base {
    Base() {
        System.out.println("Base Constructor");
    }
}

class Derived extends Base {
    Derived() {
        System.out.println("Derived Constructor");
    }
}

public class Test {
    public static void main(String[] args) {
        Derived d = new Derived();
    }
}
```

- a) Base Constructor
- b) Derived Constructor

- c) Base Constructor, Derived Constructor
- d) No output

**6. What will happen when the following code is executed?**

```
java
Copy code
class Animal {
    void eat() {
        System.out.println("Animal eats");
    }
}

class Dog extends Animal {
    void eat() {
        System.out.println("Dog eats");
    }
}

public class Test {
    public static void main(String[] args) {
        Animal a = new Animal();
        Dog d = new Dog();
        a = d;
        a.eat(); // Polymorphism
    }
}
```

- a) Animal eats
- b) Dog eats
- c) Compilation error
- d) Runtime error

**7. What will be the output of the following code?**

```

java
Copy code
class X {
    void display() {
        System.out.println("X");
    }
}

class Y extends X {
    void display() {
        System.out.println("Y");
    }
}

public class Test {
    public static void main(String[] args) {
        X obj = new Y();
        obj.display();
    }
}

```

- a) X
- b) Y
- c) Compilation error
- d) No output

**8. What is the result of this code?**

```

java
Copy code
class Base {
    void display() {
        System.out.println("Base Display");
    }
}

```

```

    }
}

class Derived extends Base {
    void display() {
        System.out.println("Derived Display");
    }
}

public class Test {
    public static void main(String[] args) {
        Base b = new Derived();
        b.display(); // Dynamic method dispatch
    }
}

```

- a) Base Display
- b) Derived Display
- c) Compilation error
- d) No output

**9. What will happen when this code runs?**

```

java
Copy code
abstract class Animal {
    abstract void makeSound();
}

class Cat extends Animal {
    void makeSound() {
        System.out.println("Meow");
    }
}

```



```

public class Test {
    public static void main(String[] args) {
        Animal a = new Cat();
        a.makeSound();
    }
}

```

- a) Compilation error
- b) Meow
- c) Runtime error
- d) No output

10. **What will the following code print?**

```

java
Copy code
class A {
    static int count = 0;

    A() {
        count++;
    }
}

public class Test {
    public static void main(String[] args) {
        A a1 = new A();
        A a2 = new A();
        A a3 = new A();
        System.out.println("Count: " + A.count);
    }
}

```

```
}
```

- a) Count: 1
- b) Count: 2
- c) Count: 3
- d) Count: 0

---

## Java Practice Exam - Set 8 (Extreme Expert Level)

### 1. What will be the output of the following code?

```
java
Copy code
class Base {
    void show() {
        System.out.println("Base");
    }
}

class Derived extends Base {
    void show() {
        System.out.println("Derived");
    }
}

public class Test {
    public static void main(String[] args) {
        Base obj = new Derived();
        obj.show(); // Dynamic method dispatch
    }
}
```

- a) Base

- b) Derived
- c) Compilation error
- d) No output

2. **Which of the following will compile without error?**

```
java
Copy code
class Parent {
    void show() {
        System.out.println("Parent");
    }
}

class Child extends Parent {
    void show() {
        System.out.println("Child");
    }
}

public class Test {
    public static void main(String[] args) {
        Parent p = new Child();
        p.show();
    }
}
```

- a) Parent
- b) Child
- c) Compilation error
- d) No output

3. **What will the following code output?**

```

java
Copy code
class A {
    static void method() {
        System.out.println("Static Method in A");
    }
}

class B extends A {
    static void method() {
        System.out.println("Static Method in B");
    }
}

public class Test {
    public static void main(String[] args) {
        A obj = new B();
        obj.method(); // Will it call A's or B's method?
    }
}

```

- a) Static Method in A
- b) Static Method in B
- c) Compilation error
- d) No output

**4. What does the following code print?**

```

java
Copy code
class Animal {
    void sound() {
        System.out.println("Animal sound");
    }
}

```

```

    }
}

class Cat extends Animal {
    void sound() {
        System.out.println("Meow");
    }
}

public class Test {
    public static void main(String[] args) {
        Animal a = new Cat();
        a.sound(); // Dynamic method dispatch
    }
}

```

- a) Animal sound
- b) Meow
- c) Compilation error
- d) No output

5. **What will happen when the following code is executed?**

```

abstract class AbstractClass {
    abstract void method();
}

class ConcreteClass extends AbstractClass {
    void method() {
        System.out.println("ConcreteClass method");
    }
}

```

```

public class Test {
    public static void main(String[] args) {
        AbstractClass obj = new ConcreteClass();
        obj.method();
    }
}

```

- a) Compilation error
- b) ConcreteClass method
- c) Runtime error
- d) No output

**6. What will be the output of the following code?**

```

java
Copy code
class A {
    void display() {
        System.out.println("Display A");
    }
}

class B extends A {
    void display() {
        System.out.println("Display B");
    }
}

public class Test {
    public static void main(String[] args) {
        A obj = new B();
        obj.display(); // Polymorphism
    }
}

```

```
}
```

- a) Display A
- b) Display B
- c) Compilation error
- d) No output

**7. What happens if the following code is executed?**

```
java
Copy code
abstract class AbstractClass {
    abstract void method();
}

class Test {
    public static void main(String[] args) {
        AbstractClass obj = new AbstractClass(); // Attempt
        to instantiate
    }
}
```

- a) Compilation error
- b) Object created successfully
- c) Runtime error
- d) No output

**8. What will the following code print?**

```
java
Copy code
class Parent {
    void show() {
```

```

        System.out.println("Parent Show");
    }
}

class Child extends Parent {
    void show() {
        System.out.println("Child Show");
    }
}

public class Test {
    public static void main(String[] args) {
        Parent p = new Child();
        p.show(); // Dynamic method dispatch
    }
}

```

- a) Parent Show
- b) Child Show
- c) Compilation error
- d) No output

9. **What is the output of the following code?**

```

java
Copy code
class A {
    static int count = 0;

    A() {
        count++;
    }
}

```



```

public class Test {
    public static void main(String[] args) {
        A a1 = new A();
        A a2 = new A();
        A a3 = new A();
        System.out.println("Count: " + A.count);
    }
}

```

- a) Count: 1
- b) Count: 2
- c) Count: 3
- d) Count: 0

10. **What happens if you attempt to instantiate an abstract class directly?**

```

java
Copy code
abstract class AbstractExample {
    abstract void display();
}

public class Test {
    public static void main(String[] args) {
        AbstractExample obj = new AbstractExample(); // At
tempt to instantiate
    }
}

```

- a) Compilation error
- b) Object created successfully
- c) Runtime error

d) No output

## Java Practice Exam - Set 9 (Extreme Expert Level)

### 1. What is the output of the following code?

```
java
Copy code
class A {
    int x;

    A(int x) {
        this.x = x;
    }

    void display() {
        System.out.println("Value of x: " + x);
    }
}

class B extends A {
    B(int x) {
        super(x);
    }
}

public class Test {
    public static void main(String[] args) {
        B b = new B(10);
        b.display();
    }
}
```

a) Value of x: 0

- b) Value of x: 10
- c) Compilation error
- d) No output

2. **What will be printed by the following code?**

```
java
Copy code
class Base {
    void show() {
        System.out.println("Base Show");
    }
}

class Derived extends Base {
    void show() {
        System.out.println("Derived Show");
    }
}

public class Test {
    public static void main(String[] args) {
        Base b = new Derived();
        b.show();
    }
}
```

- a) Base Show
- b) Derived Show
- c) Compilation error
- d) No output

3. **What will the following code output?**

```

java
Copy code
class Parent {
    void display() {
        System.out.println("Parent Display");
    }
}

class Child extends Parent {
    void display() {
        System.out.println("Child Display");
    }
}

public class Test {
    public static void main(String[] args) {
        Parent p = new Child();
        p.display(); // Dynamic method dispatch
    }
}

```

- a) Parent Display
- b) Child Display
- c) Compilation error
- d) No output

**4. What will happen if the following code is executed?**

```

java
Copy code
class Base {
    Base() {
        System.out.println("Base Constructor");
    }
}

```

```

    }
}

class Derived extends Base {
    Derived() {
        System.out.println("Derived Constructor");
    }
}

public class Test {
    public static void main(String[] args) {
        Derived d = new Derived();
    }
}

```

- a) Base Constructor
- b) Derived Constructor
- c) Base Constructor, Derived Constructor
- d) No output

**5. What will the following code print?**

```

java
Copy code
abstract class AbstractClass {
    abstract void method();
}

class ConcreteClass extends AbstractClass {
    void method() {
        System.out.println("ConcreteClass method");
    }
}

```

```

public class Test {
    public static void main(String[] args) {
        AbstractClass obj = new ConcreteClass();
        obj.method();
    }
}

```

- a) Compilation error
- b) ConcreteClass method
- c) Runtime error
- d) No output

**6. What does the following code print?**

```

java
Copy code
class A {
    int a;

    void display() {
        System.out.println("Value of a: " + a);
    }
}

class B extends A {
    int b;

    void display() {
        System.out.println("Value of b: " + b);
    }
}

public class Test {
    public static void main(String[] args) {

```

```
        A obj = new B();
        obj.display();
    }
}
```

- a) Value of a: 0
- b) Value of b: 0
- c) Compilation error
- d) No output

**7. What will happen if you attempt to instantiate an abstract class directly?**

```
java
Copy code
abstract class AbstractExample {
    abstract void display();
}

public class Test {
    public static void main(String[] args) {
        AbstractExample obj = new AbstractExample(); // At
tempt to instantiate
    }
}
```

- a) Compilation error
- b) Object created successfully
- c) Runtime error
- d) No output

**8. What will the following code output?**

```

java
Copy code
class Base {
    void show() {
        System.out.println("Base Show");
    }
}

class Derived extends Base {
    void show() {
        System.out.println("Derived Show");
    }
}

public class Test {
    public static void main(String[] args) {
        Base b = new Derived();
        b.show(); // Dynamic method dispatch
    }
}

```

- a) Base Show
- b) Derived Show
- c) Compilation error
- d) No output

9. **What is the output of the following code?**

```

java
Copy code
class A {
    static int count = 0;
}

```



```

    A() {
        count++;
    }
}

public class Test {
    public static void main(String[] args) {
        A a1 = new A();
        A a2 = new A();
        A a3 = new A();
        System.out.println("Count: " + A.count);
    }
}

```

- a) Count: 1
- b) Count: 2
- c) Count: 3
- d) Count: 0

**10. What happens if you attempt to instantiate an abstract class directly?**

```

java
Copy code
abstract class AbstractClass {
    abstract void method();
}

public class Test {
    public static void main(String[] args) {
        AbstractClass obj = new AbstractClass(); // Attempt
        to instantiate
    }
}

```

```
}
```

- a) Compilation error
- b) Object created successfully
- c) Runtime error
- d) No output

---

## Java Practice Exam - Set 10 (Extreme Expert Level)

### 1. What will be the output of the following code?

```
java
Copy code
class A {
    void display() {
        System.out.println("Display A");
    }
}

class B extends A {
    void display() {
        System.out.println("Display B");
    }
}

public class Test {
    public static void main(String[] args) {
        A obj = new B();
        obj.display(); // Dynamic method dispatch
    }
}
```

- a) Display A

- b) Display B
- c) Compilation error
- d) No output

2. **Which of the following will compile without error?**

```
java
Copy code
class Parent {
    void show() {
        System.out.println("Parent");
    }
}

class Child extends Parent {
    void show() {
        System.out.println("Child");
    }
}

public class Test {
    public static void main(String[] args) {
        Parent p = new Child();
        p.show();
    }
}
```

- a) Parent
- b) Child
- c) Compilation error
- d) No output

3. **What will the following code output?**

```

java
Copy code
class A {
    static void method() {
        System.out.println("Static Method in A");
    }
}

class B extends A {
    static void method() {
        System.out.println("Static Method in B");
    }
}

public class Test {
    public static void main(String[] args) {
        A obj = new B();
        obj.method(); // Will it call A's or B's method?
    }
}

```

- a) Static Method in A
- b) Static Method in B
- c) Compilation error
- d) No output

**4. What does the following code print?**

```

java
Copy code
class Parent {
    void display() {
        System.out.println("Parent Display");
    }
}

```

```

    }
}

class Child extends Parent {
    void display() {
        System.out.println("Child Display");
    }
}

public class Test {
    public static void main(String[] args) {
        Parent p = new Child();
        p.display(); // Dynamic method dispatch
    }
}

```

- a) Parent Display
- b) Child Display
- c) Compilation error
- d) No output

**5. What will happen when the following code is executed?**

```

java
Copy code
class Base {
    Base() {
        System.out.println("Base Constructor");
    }
}

class Derived extends Base {
    Derived() {
        System.out.println("Derived Constructor");
    }
}

```

```

    }
}

public class Test {
    public static void main(String[] args) {
        Derived d = new Derived();
    }
}

```

- a) Base Constructor
- b) Derived Constructor
- c) Base Constructor, Derived Constructor
- d) No output

**6. What will the following code print?**

```

java
Copy code
abstract class AbstractClass {
    abstract void method();
}

class ConcreteClass extends AbstractClass {
    void method() {
        System.out.println("ConcreteClass method");
    }
}

public class Test {
    public static void main(String[] args) {
        AbstractClass obj = new ConcreteClass();
        obj.method();
    }
}

```

```
}
```

- a) Compilation error
- b) ConcreteClass method
- c) Runtime error
- d) No output

**7. What does the following code print?**

```
java
Copy code
class A {
    int a;

    void display() {
        System.out.println("Value of a: " + a);
    }
}

class B extends A {
    int b;

    void display() {
        System.out.println("Value of b: " + b);
    }
}

public class Test {
    public static void main(String[] args) {
        A obj = new B();
        obj.display();
    }
}
```

```
}
```

- a) Value of a: 0
- b) Value of b: 0
- c) Compilation error
- d) No output

**8. What will happen if you attempt to instantiate an abstract class directly?**

```
java
Copy code
abstract class AbstractExample {
    abstract void display();
}

public class Test {
    public static void main(String[] args) {
        AbstractExample obj = new AbstractExample(); // At
tempt to instantiate
    }
}
```

- a) Compilation error
- b) Object created successfully
- c) Runtime error
- d) No output

**9. What will the following code output?**

```
java
Copy code
class A {
    static int count = 0;
```



```

    A() {
        count++;
    }
}

public class Test {
    public static void main(String[] args) {
        A a1 = new A();
        A a2 = new A();
        A a3 = new A();
        System.out.println("Count: " + A.count);
    }
}

```

- a) Count: 1
- b) Count: 2
- c) Count: 3
- d) Count: 0

10. **What happens if you attempt to instantiate an abstract class directly?**

```

java
Copy code
abstract class AbstractClass {
    abstract void method();
}

public class Test {
    public static void main(String[] args) {
        AbstractClass obj = new AbstractClass(); // Attempt
        to instantiate
    }
}

```

```
}
```

- a) Compilation error
- b) Object created successfully
- c) Runtime error
- d) No output