

OOPJ TEST (13/01/2026)

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1. Code

```
class A {
    final int x;
    static {
        System.out.println("A: static block");
    }
    {
        System.out.println("A: instance initializer");
        x = 100;
    }
    A(int x) {
        System.out.println("A: constructor, param x = " + x);
    }
    final void show() {
        System.out.println("A: final show(), x = " + x);
    }
    void display() {
        System.out.println("A: display()");
    }
}

class B extends A {
    int x = 200;
    static {
        System.out.println("B: static block");
    }
    {
        System.out.println("B: instance initializer");
    }
    B() {
        super(10);
        System.out.println("B: constructor");
    }
    void display() {
        System.out.println("B: display(), x = " + x + ", super.x = " + super.x);
    }
}

class C extends B {
    static {
        System.out.println("C: static block");
    }
    {
        System.out.println("C: instance initializer");
    }
    C() {
        System.out.println("C: constructor");
    }
    void display() {
        System.out.println("C: display()");
    }
}
```

```
public class test_3 {  
    public static void main(String[] args) {  
        A ref = new C();  
        ref.display();  
        ref.show();  
    }  
}
```

OUTPUT

```
PS B:\java_lab\test> java test_3.java  
A: static block  
B: static block  
C: static block  
A: instance initializer  
A: constructor, param x = 10  
B: instance initializer  
B: constructor  
C: instance initializer  
C: constructor  
C: display()  
A: final show(), x = 100
```