

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

```
public class Test {  
    static int a = 10;  
    public static void main(String[] args) {  
        System.out.println(a);  
    }  
}
```

- a) 10
- b) Compilation error
- c) Runtime error
- d) Undefined behavior

2. What will be printed when the following code is executed?

```
public class Demo {  
    static int a;  
    public static void main(String[] args) {  
        System.out.println(a);  
    }  
}
```

- a) 0
- b) Null
- c) Compilation error
- d) Garbage value

3. What will be the output of this program?

```
public class StaticDemo {  
    static int a = 5;  
    static int b;  
    public static void main(String[] args) {  
        b = a + 10;  
        System.out.println(b);  
    }  
}
```

- a) 5
- b) 10
- c) 15
- d) Compilation error

4. What will be the output of this program?

```
public class StaticMethod {  
    static int a = 20;  
    static int method() {  
        return a + 5;  
    }  
    public static void main(String[] args) {  
        System.out.println(method());  
    }  
}
```

```
}  
}
```

- a) 5
- b) 20
- c) 25
- d) Compilation error

5. What will be the output when executing the following program?

```
public class Example {  
    static int a = 10;  
    static int b = a + 10;  
    public static void main(String[] args) {  
        System.out.println(b);  
    }  
}
```

- a) 10
- b) 20
- c) 30
- d) Compilation error

6. What will be printed when the following code is executed?

```
public class ModifyStatic {  
    static int a = 5;  
    static void update() {  
        a = a + 10;  
    }  
    public static void main(String[] args) {  
        update();  
        System.out.println(a);  
    }  
}
```

- a) 5
- b) 10
- c) 15
- d) Compilation error

7. What will be the output of this program?

```
public class StaticVariable {  
    static int a = 10;  
    static void modify() {  
        a = a + 5;  
    }  
    public static void main(String[] args) {  
        modify();  
        modify();  
        System.out.println(a);  
    }  
}
```

- a) 10
- b) 15
- c) 20
- d) Compilation error

8. What will be the output of this program?

```
public class MethodCall {
    static int a = 20;
    static int method(int x) {
        return x + a;
    }
    public static void main(String[] args) {
        System.out.println(method(10));
    }
}
```

- a) 10
- b) 20
- c) 30
- d) Compilation error

9. What will be the output of the following Java program?

```
public class MethodCallTest {
    static int a = 50;
    static int method1() {
        return method2() + 10;
    }
    static int method2() {
        return a + 5;
    }
    public static void main(String[] args) {
        System.out.println(method1());
    }
}
```

- a) 55
- b) 60
- c) 65
- d) Compilation error

10. What will be the output of the following Java code?

```
public class MethodChaining {
    static int a = 10;
    static int method1(int x) {
        return method2(x + a);
    }
    static int method2(int y) {
        return method3(y * 2);
    }
    static int method3(int z) {
        return z - 5;
    }
}
```

```

    }
    public static void main(String[] args) {
        System.out.println(method1(5));
    }
}

```

- a) 10
- b) 15
- c) 25
- d) 30

11. What will be the final value of `a` after executing this code?

```

public class FinalValue {
    static int a = 5;
    static void changeValue() {
        a = 100;
    }
    public static void main(String[] args) {
        changeValue();
        System.out.println(a);
    }
}

```

- a) 5
- b) 100
- c) Compilation error
- d) Undefined behavior

12. What will be the output of this code?

```

public class StaticMethodTest {
    static int a = 50;
    static int method() {
        return a;
    }
    public static void main(String[] args) {
        System.out.println(method());
    }
}

```

- a) 50
- b) 0
- c) Compilation error
- d) Undefined behavior

13. What will be the output when executing this Java program?

```

public class StaticTest {
    static int a = 40;
    static int b = a + 10;
    static int method() {
        return b;
    }
}

```

```

    }
    public static void main(String[] args) {
        System.out.println(method());
    }
}

```

- a) 40
- b) 50
- c) 60
- d) Compilation error

14. What will be printed by the following code?

```

public class Example {
    static int a = 15;
    static int b = 5;
    static int method() {
        return a * b;
    }
    public static void main(String[] args) {
        System.out.println(method());
    }
}

```

- a) 10
- b) 20
- c) 75
- d) Compilation error

15. What will be the output of this Java program?

```

public class StaticCalculation {
    static int a = 10;
    static int b = 20;
    static int sum() {
        return a + b;
    }
    public static void main(String[] args) {
        System.out.println(sum());
    }
}

```

- a) 10
- b) 20
- c) 30
- d) Compilation error

16. `public class Test {`
 `static int a = 25;`
 `static int method() {`
 `return a * 2;`
 `}`
 `public static void main(String[] args) {`
 `System.out.println(method());`

```
}  
}
```

- a) 25
- b) 50
- c) 75
- d) Compilation error

17.

```
public class Test {  
    static int a = 12;  
    static int method() {  
        return a - 4;  
    }  
    public static void main(String[] args) {  
        System.out.println(method());  
    }  
}
```

- a) 4
- b) 8
- c) 12
- d) Compilation error

18.

```
public class StaticCalculation {  
    static int a = 30;  
    static int b = 10;  
    static int subtract() {  
        return a - b;  
    }  
    public static void main(String[] args) {  
        System.out.println(subtract());  
    }  
}
```

- a) 10
- b) 20
- c) 30
- d) Compilation error

19.

```
public class MultiplyStatic {  
    static int a = 6;  
    static int b = 7;  
    static int multiply() {  
        return a * b;  
    }  
    public static void main(String[] args) {  
        System.out.println(multiply());  
    }  
}
```

- a) 13
 - b) 42
 - c) 67
 - d) Compilation error
-

20.

```
public class StaticDivision {  
    static int a = 100;  
    static int b = 5;  
    static int divide() {  
        return a / b;  
    }  
    public static void main(String[] args) {  
        System.out.println(divide());  
    }  
}
```

- a) 5
 - b) 10
 - c) 20
 - d) Compilation error
-

Descriptive Questions

Question:

Write a Java program to declare a **static integer variable** and print its default value.

Explanation:

- Declare a **static integer variable** at the class level without initializing it.
- Print its value inside the `main()` method to check the default value assigned by Java.

Expected Output Example:

Since Java assigns `0` as the default value for uninitialized static integers, the output should be:

```
0
```

Question:

Create a **static method** that takes two integers as parameters and returns their sum. Call this method from `main()` and print the result.

Explanation:

- Define a **static method** that takes two integer parameters and returns their sum.
- Call this method from `main()` with sample values and print the result.

Expected Output Example:

If the input values are `10` and `20`, the output should be:

Question:

Write a Java program with a **static variable**, modify its value inside a method, and print the updated value in `main()`.

Explanation:

- Declare a **static integer variable** with an initial value.
- Create a **static method** that modifies the value of this variable.
- Call this method in `main()` and print the updated value.

Expected Output Example:

If the initial value is `5` and the method updates it to `15`, the output should be:

```
Updated value: 15
```

Question:

Create a Java program where a **static method calls another static method** and prints the result.

Explanation:

- Define two **static methods**:
 - The first method performs an arithmetic operation (e.g., adding 10 to an input number).
 - The second method calls the first method and prints its return value.
- Call the second method from `main()`.

Expected Output Example:

If the first method receives `10` and adds `10`, the final output should be:

```
Result: 20
```

Question:

Write a Java program to **declare two static integer variables**, perform multiplication inside a **static method**, and print the result from `main()`.

Explanation:

- Declare **two static integer variables** at the class level.
- Create a **static method** that multiplies these two variables and returns the result.
- Call this method from `main()` and print the result.

Expected Output Example:

If the two static variables are `6` and `7`, the output should be:

```
Product: 42
```