1. Who developed Java?

- a) Microsoft
- b) Sun Microsystems
- c) IBM
- d) Oracle

2. Java was originally called:

- a) Oak
- b) Maple
- c) Pine
- d) Cedar

3. What type of language is Java?

- a) Compiled
- b) Interpreted
- c) Both compiled and interpreted
- d) Neither compiled nor interpreted

4. Java programs are executed using:

- a) JVM (Java Virtual Machine)
- b) JDK (Java Development Kit)
- c) JRE (Java Runtime Environment)
- d) JIT (Just-In-Time Compiler)

5. Java is:

- a) Platform-dependent
- b) Platform-independent
- c) OS-dependent
- d) None of the above

6. Which of the following is not a Java feature?

- a) Object-Oriented
- b) Platform Independent
- c) Uses Pointers
- d) Secure

7. Java is mainly used for:

- a) Web applications
- b) Mobile applications
- c) Enterprise applications
- d) All of the above

8. Which component is responsible for converting Java bytecode to machine code?

- a) Compiler
- b) Interpreter
- c) JVM
- d) JIT Compiler

9. Java source code is compiled into:

- a) Machine code
- b) Assembly code

- c) Bytecode
- d) Executable file

10. The extension of a compiled Java file is:

- a) .java
- b) .class
- c) .exe
- d) .obj

11. Java is known as:

- a) Procedural Language
- b) Functional Language
- c) Object-Oriented Language
- d) Both Object-Oriented and Functional

12. Which of the following is true about Java?

- a) Java supports multiple inheritance using classes
- b) Java supports operator overloading
- c) Java has automatic memory management
- d) Java uses pointers

13. The main function in Java is defined as:

- a) public static void main(String[] args)
- b) public void main(String args)
- c) static void main(String args)
- d) void main(String[] args)

14. Java was released in:

- a) 1991
- b) 1995
- c) 2000
- d) 1985

15. Java API stands for:

- a) Advanced Programming Interface
- b) Application Programming Interface
- c) Application Protocol Interface
- d) None of the above

16. Java is considered to be secure because:

- a) It has no pointers
- b) It supports exception handling
- c) It runs inside JVM
- d) Both a and c

17. Java provides high performance due to:

- a) Bytecode interpretation
- b) Just-In-Time (JIT) Compiler
- c) Garbage collection
- d) All of the above

18. Which of the following features make Java portable?

- a) Platform-independent bytecode
- b) Automatic garbage collection
- c) Strong memory management
- d) None of the above

19. Which is not an advantage of Java?

- a) Platform independence
- b) Memory leaks due to pointers
- c) Object-oriented programming
- d) Rich API

20. Which of the following statements about Java is false?

- a) Java is faster than C++
- b) Java provides automatic garbage collection
- c) Java is object-oriented
- d) Java is secure

21. Java is widely used in:

- a) Banking applications
- b) Android applications
- c) Web development
- d) All of the above

22. Why is Java considered dynamic?

- a) It supports dynamic binding
- b) It allows memory allocation at runtime
- c) It supports dynamic loading of classes
- d) All of the above

23. Java uses automatic garbage collection to:

- a) Free memory manually
- b) Automatically deallocate unused objects
- c) Remove syntax errors
- d) Speed up execution

24. Which of the following Java editions is used for enterprise-level applications?

- a) J2SE
- b) J2EE
- c) J2ME
- d) JDK

25. Which feature of Java makes it suitable for networking?

- a) Multi-threading
- b) Secure execution
- c) Robustness
- d) Built-in network libraries

26. Java’s Write Once, Run Anywhere concept is due to:

- a) JVM
- b) JIT Compiler
- c) Bytecode

- d) Garbage Collection

27. The Java compiler converts source code into:

- a) Executable file
- b) Bytecode
- c) Assembly code
- d) Machine code

28. Java supports multi-threading, which means:

- a) It allows multiple programs to run simultaneously
- b) It allows multiple threads to execute in parallel
- c) It does not support concurrency
- d) None of the above

29. Which company currently owns Java?

- a) Sun Microsystems
- b) Oracle
- c) Microsoft
- d) Google

30. Which Java version introduced modular programming?

- a) Java 6
- b) Java 7
- c) Java 8
- d) Java 9

31. How many primitive data types does Java have?

- a) 6
- b) 7
- c) 8
- d) 9

32. Which is a valid primitive data type in Java?

- a) String
- b) Boolean
- c) Character
- d) Both b and c

33. Which data type is used for decimal values?

- a) int
- b) float
- c) boolean
- d) char

34. What is the size of an int in Java?

- a) 8-bit
- b) 16-bit
- c) 32-bit
- d) 64-bit

35. The default value of an int variable in Java is:

- a) 0
- b) null
- c) garbage value
- d) undefined

36. What is the wrapper class for int?

- a) Int
- b) Integer
- c) intWrapper
- d) None

37. Which keyword is used to declare a constant in Java?

- a) final
- b) static
- c) const
- d) variable

38. What is the default value of a boolean variable?

- a) true
- b) false
- c) null
- d) 0

39. Which of these is not a valid Java variable name?

- a) _value
- b) $price
- c) 123name
- d) myVariable

40. A variable declared inside a method is called:

- a) Instance variable
- b) Local variable
- c) Static variable
- d) Global variable

41. Java uses which character to terminate a statement?

- a) . (dot)
- b) ; (semicolon)
- c) , (comma)
- d) : (colon)

42. What is the range of a byte in Java?

- a) -128 to 127
- b) -255 to 255
- c) 0 to 256
- d) None

43. Which type of variable belongs to a class rather than an instance?

- a) Local
- b) Instance
- c) Static

- d) Final

44. Which primitive data type can store the largest value?

- a) int
- b) long
- c) float
- d) double

45. What is the default value of a char in Java?

- a) '\0' (null character)
- b) '0'
- c) ' ' (space)
- d) None

46. Which of these is NOT a valid floating-point data type?

- a) float
- b) double
- c) real
- d) None of the above

47. What is the default value of a long variable?

- a) 0
- b) null
- c) undefined
- d) garbage value

48. Which data type should be used to store true/false values?

- a) int
- b) boolean
- c) char
- d) byte

49. What is the difference between float and double in Java?

- a) float has more precision than double
- b) double has more precision than float
- c) float and double have the same precision
- d) float stores larger values than double

50. A variable declared inside a class but outside any method is called:

- a) Local variable
- b) Instance variable
- c) Static variable
- d) Both b and c

51. Which keyword is used to allocate memory dynamically in Java?

- a) malloc
- b) new
- c) alloc
- d) dynamic

52. What happens if we declare a variable but do NOT initialize it?

- a) Compilation error
- b) Default value is assigned
- c) Runtime error
- d) It remains uninitialized

53. Which keyword is used to define a constant variable in Java?

- a) static
- b) final
- c) constant
- d) immutable

54. What will be the result of `byte b = 50 + 10;`?

- a) Compile successfully
- b) Compilation error due to type mismatch
- c) Runtime error
- d) None of the above

55. What is type casting in Java?

- a) Converting data from one type to another
- b) Assigning an object to a variable
- c) Overriding a method
- d) None of the above

56. Which type of type casting happens automatically in Java?

- a) Explicit casting
- b) Widening (Implicit) casting
- c) Narrowing (Explicit) casting
- d) None

57. In Java, what will happen if you assign a `double` value to an `int` variable without type casting?

- a) Compilation error
- b) Rounds off the value
- c) Truncates the decimal part
- d) No error

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

```
int a = 10;
double b = a;
System.out.println(b);
```

- a) Compilation error
- b) 10.0
- c) 10
- d) None

59. Which of the following statements is correct about variable scope?

- a) A local variable is accessible anywhere in the program
- b) A static variable belongs to the instance of a class
- c) Instance variables are accessible outside the class
- d) A local variable is accessible only within its method/block

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

```
int x = 10;
x = x + 10.5;
System.out.println(x);
```

- a) Compilation error
- b) 20.5
- c) 20
- d) None of the above

61. Which variable type is shared among all instances of a class?

- a) Instance variable
- b) Local variable
- c) Static variable
- d) Final variable

62. How do you declare a variable in Java?

- a) int a = 10;
- b) variable int a = 10;
- c) int a;
- d) Both a and c

63. What will be the result of `int a = 10; double b = a;` ?

- a) Compilation error
- b) Automatic type conversion
- c) Runtime error
- d) None of the above

64. In Java, which data type is used for storing single characters?

- a) char
- b) String
- c) Character
- d) Both a and c

65. What is the size of a `boolean` variable in Java?

- a) 1 bit
- b) 2 bytes
- c) 1 byte
- d) 4 bytes

66. Which of the following cannot be used as a variable name in Java?

- a) _name
- b) $amount
- c) class
- d) myVar

67. Which modifier allows a variable's value to remain unchanged once initialized?

- a) static
- b) final
- c) const
- d) immutable

68. What happens if a variable is declared as static?

- a) It belongs to the instance of the class
- b) It is shared among all objects of the class
- c) It is stored in the heap memory
- d) It can be accessed only within the method

69. What happens if we use an undeclared variable in Java?

- a) Compilation error
- b) The program runs normally
- c) Runtime exception
- d) None

70. The `null` value can be assigned to which data type?

- a) int
- b) boolean
- c) double
- d) Object

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

```
public class Test {
    public static void main(String[] args) {
        System.out.println("Java " + 10 + 20);
    }
}
```

- a) Java 30
- b) 30 Java
- c) Java 1020
- d) Compilation error

72. What happens if the `main` method is written as `private`?

```
public class Main {
    private static void main(String[] args) {
        System.out.println("Hello");
    }
}
```

- a) No output
- b) Compilation error
- c) Prints "Hello"
- d) Runtime error

73. What will be the output of this program?

```
public class Test {
    public static void main(String[] args) {
        String s1 = "Hello";
        String s2 = new String("Hello");
        System.out.println(s1 == s2);
    }
}
```

- a) true
- b) false
- c) Compilation error
- d) Runtime error

74. Identify the correct statement about the following Java program:

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

- a) 10 10
- b) 5 10
- c) 10 11
- d) Compilation error

75. What will be the output of this program?

```
public class Test {
    public static void main(String[] args) {
        double d = 10.5;
        int x = (int) d;
        System.out.println(x);
    }
}
```

- a) 10
- b) 10.5
- c) Compilation error
- d) Runtime error

76. What will be the output?

```
public class Example {
    public static void main(String[] args) {
        float f = 10.5f;
        System.out.println(f);
    }
}
```

- a) 10.5
- b) Compilation error
- c) 10.50
- d) None

77. What will be the result of the following code?

```
public class Test {
    public static void main(String[] args) {
        int a = 5;
        int b = 2;
```

```
        double result = a / b;
        System.out.println(result);
    }
}
```

- a) 2.5
- b) 2
- c) Compilation error
- d) None

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

```
public class Demo {
    public static void main(String[] args) {
        int x = 10;
        int y = 5;
        System.out.println(x + y + " is the sum");
    }
}
```

- a) 15 is the sum
- b) Compilation error
- c) 10 5 is the sum
- d) None

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

```
public class Test {
    public static void main(String[] args) {
        System.out.println(10 + 20 + "Hello" + 10 + 20);
    }
}
```

- a) 30Hello1020
- b) 10Hello20
- c) Hello1020
- d) Compilation error

80. What is the correct way to declare a main method in Java?

- a) `static void main(String[] args)`
- b) `public void main(String[] args)`
- c) `public static void main(String args[])`
- d) `private static void main(String args[])`

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

```
public class Test {
    public static void main(String[] args) {
        char c = 'A' + 1;
        System.out.println(c);
    }
}
```

- a) A

- b) B
- c) Compilation error
- d) None

82. What is the output?

```
public class Example {
    public static void main(String[] args) {
        int x = 5;
        x += 2;
        System.out.println(x);
    }
}
```

- a) 5
- b) 7
- c) Compilation error
- d) Runtime error

83. Identify the error in the code below:

```
public class Example {
    public static void main(String[] args) {
        int x = 5.5;
        System.out.println(x);
    }
}
```

- a) No error
- b) Compilation error
- c) Runtime error
- d) Prints 5

84. What will be the result of `10 / 3` in Java?

```
public class Test {
    public static void main(String[] args) {
        System.out.println(10 / 3);
    }
}
```

- a) 3
- b) 3.33
- c) Compilation error
- d) None

85. What will be the result of `10 % 3` in Java?

```
public class Test {
    public static void main(String[] args) {
        System.out.println(10 % 3);
    }
}
```

- a) 1

- b) 3
- c) 0
- d) None

86. What happens when you try to divide an integer by zero in Java?

```
public class Test {
    public static void main(String[] args) {
        int x = 10 / 0;
        System.out.println(x);
    }
}
```

- a) Compilation error
- b) ArithmeticException at runtime
- c) Prints 0
- d) None

87. What happens when you divide a double by zero in Java?

```
public class Test {
    public static void main(String[] args) {
        double d = 10.0 / 0;
        System.out.println(d);
    }
}
```

- a) Infinity
- b) NaN
- c) Compilation error
- d) Runtime error

88. What will be the output?

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

- a) 21
- b) 20
- c) 22
- d) Compilation error

89. What will be the output of `System.out.println('A' + 1);`?

- a) 66
- b) A1
- c) Compilation error
- d) B

90. Which of the following is NOT a primitive data type in Java?

- a) int
- b) float
- c) String
- d) double

91. What is a static variable in Java?

- a) A variable that belongs to a specific object instance
- b) A variable that belongs to a class rather than any object
- c) A variable declared inside a method
- d) A variable that cannot be changed

92. Where is a static variable stored in memory?

- a) Heap memory
- b) Stack memory
- c) Method area (Class memory)
- d) CPU registers

93. How many copies of a static variable exist per class?

- a) One per object
- b) One per thread
- c) One per class
- d) One per method call

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

```
class Test {
    static int x = 10;
    public static void main(String[] args) {
        Test obj1 = new Test();
        Test obj2 = new Test();
        obj1.x = 20;
        System.out.println(obj2.x);
    }
}
```

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

95. Which keyword is used to access a static variable from another class?

- a) `this`
- b) `super`
- c) `classname.variablename`
- d) `objectname.variablename`

96. What will be the output?

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

```
    }
}
```

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

97. Which of the following is true for static variables?

- a) They can be accessed using an object reference
- b) They can be accessed using a class name
- c) Both a and b
- d) None of the above

98. What happens if we access a static variable without initializing it?

- a) Compilation error
- b) Runtime error
- c) Default value is assigned
- d) None

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

```
class Test {
    static int x = 5;
    static int y;
    public static void main(String[] args) {
        System.out.println(x + " " + y);
    }
}
```

- a) 5 0
- b) 5 null
- c) Compilation error
- d) None

100. When is a static variable initialized in Java?

- a) When an object is created
- b) When a class is loaded into memory
- c) When a method is executed
- d) None

101. What is an instance variable?

- a) A variable declared inside a method
- b) A variable declared inside a class but outside any method
- c) A variable declared with `static` keyword
- d) A variable that cannot be changed

102. When is an instance variable created?

- a) When a class is loaded
- b) When an object is created
- c) When a method is called
- d) None

103. What will be the output of this program?

```
class Test {
    int x = 10;
    public static void main(String[] args) {
        Test obj1 = new Test();
        Test obj2 = new Test();
        obj1.x = 20;
        System.out.println(obj2.x);
    }
}
```

- a) 10
- b) 20
- c) Compilation error
- d) None

104. Where are instance variables stored in memory?

- a) Stack
- b) Heap
- c) Method area
- d) Registers

105. What is the default value of an instance variable of type `int`?

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

106. How many copies of an instance variable exist per class?

- a) One per class
- b) One per object
- c) One per thread
- d) None

107. Can instance variables be declared `static`?

- a) Yes
- b) No
- c) Only if initialized
- d) None

108. What is the access modifier of an instance variable if none is specified?

- a) private
- b) protected
- c) public
- d) default (package-private)

109. What will be the output of this program?

```
class Test {
    int x;
    public static void main(String[] args) {
```

```
        Test obj = new Test();
        System.out.println(obj.x);
    }
}
```

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

110. What happens if we access an instance variable without initializing it?

- a) Compilation error
- b) Runtime error
- c) Default value is assigned
- d) None

111. What is a local variable?

- a) A variable declared inside a class but outside a method
- b) A variable declared inside a method or block
- c) A variable declared with `static` keyword
- d) None

112. Where is a local variable stored in memory?

- a) Heap
- b) Stack
- c) Method area
- d) None

113. What will be the output of this program?

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

- a) Compilation error
- b) Runtime error
- c) 0
- d) None

114. When is a local variable created?

- a) When a method is called
- b) When an object is created
- c) When a class is loaded
- d) None

115. Can a local variable have a default value?

- a) Yes
- b) No
- c) Only in some cases

- d) None

116. What will be the output of this program?

```
class Test {
    public static void main(String[] args) {
        int x = 5;
        {
            int x = 10;
            System.out.println(x);
        }
    }
}
```

- a) 10
- b) Compilation error
- c) 5
- d) None

117. What happens if we try to access a local variable outside its scope?

- a) Compilation error
- b) Runtime error
- c) Default value is assigned
- d) None

118. Can a local variable be `static`?

- a) Yes
- b) No
- c) Only inside a method
- d) None

119. What will be the output of this program?

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

- a) 10
- b) Compilation error
- c) 0
- d) None

120. When is a local variable destroyed?

- a) When the method ends
- b) When the object is garbage collected
- c) When the JVM shuts down
- d) None

121. What is a static method in Java?

- a) A method that belongs to an instance of a class

- b) A method that belongs to the class itself
- c) A method that can access only instance variables
- d) A method that cannot be accessed

122. How do you call a static method from another class?

- a) Using an object reference
- b) Using the class name
- c) Using `this`
- d) Using `super`

123. Which of the following is true about non-static methods?

- a) They belong to the class, not instances
- b) They require an instance to be called
- c) They can only access static variables
- d) They cannot be overridden

124. Can a non-static method call a static method?

- a) Yes
- b) No
- c) Only in abstract classes
- d) Only if it's private

125. What is the default modifier for static methods in Java?

- a) private
- b) protected
- c) public
- d) package-private (default)

126. Which of the following statements about static methods is true?

- a) They can use `this` keyword
- b) They can be called without an object
- c) They must be declared final
- d) They can be overridden

127. Where are static methods stored in memory?

- a) Heap
- b) Stack
- c) Method area (Class memory)
- d) CPU registers

128. What happens if we call a non-static method inside a static method directly?

- a) Compilation error
- b) Runtime error
- c) Executes normally
- d) Prints `null`

129. Can we create a static method inside a local class?

- a) Yes
- b) No
- c) Only in interfaces
- d) Only in abstract classes

130. Can a static method access an instance variable?

- a) Yes, always
- b) No, it causes a compilation error
- c) Only if it's `final`
- d) Only if declared inside a method

131. Which of the following is NOT allowed in static methods?

- a) Calling other static methods
- b) Modifying static variables
- c) Accessing instance variables directly
- d) Returning values

132. Which of the following statements about static methods is FALSE?

- a) They can be called without an object
- b) They cannot access instance variables
- c) They can use `this` keyword
- d) They can be accessed using class name

133. Which of the following is a correct way to call a static method from another class?

- a) `ObjectName.methodName();`
- b) `this.methodName();`
- c) `ClassName.methodName();`
- d) `super.methodName();`

134. What happens if a static method tries to use `this`?

- a) Compilation error
- b) Runtime error
- c) `this` will refer to the calling object
- d) `this` will refer to the class

135. Which of the following is true about non-static methods?

- a) They cannot access static variables
- b) They do not require an object to be called
- c) They can call static methods
- d) They must always be `public`

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

```
class Test {
    static void show() {
        System.out.println("Static Method");
    }
    public static void main(String[] args) {
        show();
    }
}
```

- a) Compilation error
- b) Runtime error
- c) Static Method
- d) None

137. Identify the error in the code below:

```
class Test {
    static void method() {
        System.out.println(value);
    }
    int value = 100;
}
```

- a) `static` method cannot access instance variables
- b) Compilation error
- c) No error
- d) Runtime error

138. What happens when we call a non-static method from `main()` directly?

```
class Test {
    void display() {
        System.out.println("Non-static method");
    }
    public static void main(String[] args) {
        display();
    }
}
```

- a) Compilation error
- b) Runtime error
- c) Non-static method
- d) None

139. What will be the output?

```
class Test {
    int x = 5;
    static void method() {
        System.out.println(x);
    }
}
```

- a) 5
- b) Compilation error
- c) Runtime error
- d) None

140. Which of the following statements will execute correctly?

```
class Test {
    int x = 10;
    static int y = 20;
    static void method() {
        System.out.println(y);
    }
}
```

- a) `Test.method();`
- b) `Test obj = new Test(); obj.method();`
- c) `System.out.println(Test.x);`
- d) `Test obj = new Test(); System.out.println(obj.y);`

141. Identify the error:

```
class Test {
    static void show() {
        this.display();
    }
    void display() {
        System.out.println("Hello");
    }
}
```

- a) `this` cannot be used in a static method
- b) No error
- c) Runtime error
- d) None

142. What will be the output?

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

- a) 10
- b) Compilation error
- c) Runtime error
- d) None

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

```
class Test {
    static int a = 5;
    static int b = 2 + a;
    public static void main(String[] args) {
        System.out.println(b);
    }
}
```

- a) 5
- b) 2
- c) 7
- d) Compilation Error

144. What will be printed?

```
class Test {
    int a = 10;
    static int b = 20;
    public static void main(String[] args) {
        Test obj = new Test();
        System.out.println(obj.a + b);
    }
}
```

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

145. What is the output?

```
class Test {
    static int x = 10;
    int y = 20;
    static void method() {
        System.out.println(x * 2);
    }
    public static void main(String[] args) {
        method();
    }
}
```

- a) 10
- b) 20
- c) 40
- d) Compilation Error

146. What will happen?

```
class Test {
    static int x = 10;
    int y = 5;
    static void method() {
        System.out.println(y);
    }
}
```

- a) 5
- b) Compilation Error
- c) 10
- d) 0

147. What will be printed?

```
class Test {
    public static void main(String[] args) {
        int a = 5, b = 2;
        System.out.println(a / b);
```

```
    }
}
```

- a) 2
- b) 2.5
- c) 2.0
- d) Compilation Error

148. What will be the output?

```
class Test {
    public static void main(String[] args) {
        int a = 7, b = 3;
        System.out.println(a % b);
    }
}
```

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

149. Identify the output:

```
class Test {
    public static void main(String[] args) {
        int a = 4, b = 5;
        boolean result = (a != b) && (a < b);
        System.out.println(result);
    }
}
```

- a) true
- b) false
- c) Compilation Error
- d) None

150. What will be printed?

```
class Test {
    public static void main(String[] args) {
        int x = 5, y = 3;
        boolean res = (x > y) || (x == y);
        System.out.println(res);
    }
}
```

- a) true
- b) false
- c) Compilation Error
- d) None

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

```
class Test {
    public static void main(String[] args) {
        int a = 15, b = 4;
        System.out.println(a / b);
    }
}
```

- a) 3
- b) 3.75
- c) 4
- d) Compilation Error

152. What will be printed?

```
class Test {
    public static void main(String[] args) {
        double a = 10.0, b = 3.0;
        System.out.println(a / b);
    }
}
```

- a) 3
- b) 3.0
- c) 3.3333333
- d) Compilation Error

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

```
class Test {
    public static void main(String[] args) {
        int a = 7, b = 3;
        System.out.println(a % b);
    }
}
```

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

154. What will be the output?

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

- a) 11
- b) 12
- c) 10
- d) Compilation Error

155. Identify the output:

```
class Test {
    public static void main(String[] args) {
        int a = 10;
        int b = (a > 5) ? 20 : 30;
        System.out.println(b);
    }
}
```

- a) 20
- b) 30
- c) Compilation Error
- d) None

156. What will be printed?

```
class Test {
    public static void main(String[] args) {
        int a = 5, b = 10;
        int result = (a < b) ? a * 2 : b / 2;
        System.out.println(result);
    }
}
```

- a) 5
- b) 10
- c) 2
- d) 15

157. What is the output?

```
class Test {
    public static void main(String[] args) {
        int x = 5, y = 3;
        boolean result = (x > y) && (x == y);
        System.out.println(result);
    }
}
```

- a) true
- b) false
- c) Compilation Error
- d) None

158. What will be printed?

```
class Test {
    public static void main(String[] args) {
        int x = 10, y = 20;
        System.out.println((x < y) || (x > y));
    }
}
```

- a) true
- b) false

- c) Compilation Error
- d) None

159. Identify the output:

```
class Test {
    static int x = 10;
    int y = 5;
    static void method() {
        System.out.println(x * 2);
    }
    public static void main(String[] args) {
        method();
    }
}
```

- a) 10
- b) 20
- c) 40
- d) Compilation Error

160. What will happen in the following code?

```
class Test {
    static int x = 10;
    int y = 5;
    static void method() {
        System.out.println(y);
    }
}
```

- a) 5
- b) Compilation Error
- c) 10
- d) 0

161. What will be printed?

```
class Test {
    public static void main(String[] args) {
        int x = 10;
        if (x > 5)
            System.out.println("Hello");
    }
}
```

- a) Hello
- b) No Output
- c) Compilation Error
- d) None

162. What will be the output?

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

```
        int x = 8;
        if (x % 2 == 0) {
            System.out.println("Even");
        } else {
            System.out.println("Odd");
        }
    }
}
```

- a) Even
- b) Odd
- c) Compilation Error
- d) None

163. What will be printed?

```
class Test {
    public static void main(String[] args) {
        int x = 4, y = 2;
        if (x > y) {
            System.out.println("X is greater");
        } else {
            System.out.println("Y is greater");
        }
    }
}
```

- a) X is greater
- b) Y is greater
- c) Compilation Error
- d) None

164. Identify the output:

```
class Test {
    public static void main(String[] args) {
        int a = 10, b = 20;
        int max = (a > b) ? a : b;
        System.out.println(max);
    }
}
```

- a) 10
- b) 20
- c) Compilation Error
- d) None

165. Identify the output:

```
class Test {
    public static void main(String[] args) {
        int num = 5;
        System.out.println((num % 2 == 0) ? "Even" : "Odd");
```

```
    }
}
```

- a) Even
- b) Odd
- c) Compilation Error
- d) None

166. What will be printed?

```
class Test {
    public static void main(String[] args) {
        int x = 7;
        if (x > 5 && x < 10) {
            System.out.println("Valid");
        } else {
            System.out.println("Invalid");
        }
    }
}
```

- a) Valid
- b) Invalid
- c) Compilation Error
- d) None

167. What will be printed?

```
class Test {
    public static void main(String[] args) {
        int x = 9;
        switch (x) {
            case 10: System.out.println("Ten"); break;
            case 9: System.out.println("Nine"); break;
            default: System.out.println("Other");
        }
    }
}
```

- a) Ten
- b) Nine
- c) Other
- d) Compilation Error

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

```
class Test {
    public static void main(String[] args) {
        int a = 5, b = 2;
        System.out.println(a * b - a / b);
    }
}
```

- a) 8
- b) 9

- c) 10
- d) 12

169. What will be the output?

```
class Test {
    public static void main(String[] args) {
        int a = 4, b = 6;
        System.out.println(a + b * a - b);
    }
}
```

- a) 10
- b) 14
- c) 22
- d) 26

170. What will be printed?

```
class Test {
    public static void main(String[] args) {
        boolean x = true;
        boolean y = false;
        System.out.println(x || y);
    }
}
```

- a) true
- b) false
- c) Compilation Error
- d) None

171. What is the result of the following conditional expression?

```
class Test {
    public static void main(String[] args) {
        int num = 8;
        System.out.println((num % 2 == 0) ? "Even" : "Odd");
    }
}
```

- a) Even
- b) Odd
- c) Compilation Error
- d) None

172. What will be the output?

```
class Test {
    public static void main(String[] args) {
        int x = 7, y = 5;
        if (x >= 5 && y < 10) {
            System.out.println("Valid");
        } else {
            System.out.println("Invalid");
```

```
        }
    }
}
```

- a) Valid
- b) Invalid
- c) Compilation Error
- d) None

173. Identify the output:

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

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

174. What will be printed?

```
class Test {
    public static void main(String[] args) {
        int a = 10, b = 20;
        int max = (a > b) ? a : b;
        System.out.println(max);
    }
}
```

- a) 10
- b) 20
- c) Compilation Error
- d) None

175. What is the output?

```
class Test {
    public static void main(String[] args) {
        int a = 10;
        int b = 5;
        System.out.println((a > b) && (a % b == 0));
    }
}
```

- a) true
- b) false
- c) Compilation Error
- d) None

176. What will be the output?

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

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

177. What is the result of the following ternary operation?

```
class Test {
    public static void main(String[] args) {
        int num = 3;
        String result = (num % 2 == 0) ? "Even" : "Odd";
        System.out.println(result);
    }
}
```

- a) Even
- b) Odd
- c) Compilation Error
- d) None

178. Identify the output:

```
class Test {
    static int value = 50;
    public static void main(String[] args) {
        if (value >= 50) {
            System.out.println("High Value");
        } else {
            System.out.println("Low Value");
        }
    }
}
```

- a) High Value
- b) Low Value
- c) Compilation Error
- d) None

179. What will be printed?

```
class Test {
    static int a = 30;
    static int b = 20;
    public static void main(String[] args) {
        int result = (a > b) ? a - b : b - a;
        System.out.println(result);
```

```
    }
}
```

- a) 10
- b) -10
- c) 50
- d) Compilation Error

180. What will be the result of the following code?

```
class Test {
    public static void main(String[] args) {
        int x = 12, y = 8;
        System.out.println((x > y) || (x % 2 == 0));
    }
}
```

- a) true
- b) false
- c) Compilation Error
- d) None

181. What will be printed?

```
class Test {
    public static void main(String[] args) {
        int x = 5, y = 3;
        System.out.println(x & y);
    }
}
```

- a) 5
- b) 3
- c) 1
- d) 0

182. What is the output?

```
class Test {
    public static void main(String[] args) {
        int x = 4, y = 5;
        System.out.println(x | y);
    }
}
```

- a) 4
- b) 5
- c) 6
- d) 7

183. Identify the output:

```
class Test {
    public static void main(String[] args) {
        int x = 6;
```

```
        System.out.println(~x);
    }
}
```

- a) 6
- b) -7
- c) 7
- d) -6

184. What will be the output?

```
public class Test {
    int x = 5;

    void modify(Test t) {
        t.x += 10;
    }

    public static void main(String[] args) {
        Test obj = new Test();
        obj.modify(obj);
        System.out.println(obj.x);
    }
}
```

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

185. Identify the output:

```
public class Example {
    int num = 20;

    void change() {
        num -= 5;
    }

    public static void main(String[] args) {
        Example obj = new Example();
        obj.change();
        System.out.println(obj.num);
    }
}
```

- a) 15
- b) 20
- c) Compilation Error
- d) None

186. What will be printed?

```
public class Check {
    int a = 30;

    void update() {
        a += 10;
    }

    public static void main(String[] args) {
        Check obj = new Check();
        obj.update();
        System.out.println(obj.a);
    }
}
```

- a) 30
- b) 40
- c) Compilation Error
- d) None

187. What will be the output?

```
public class Test {
    int x = 10;

    void modify(int x) {
        x += 5;
        System.out.println("Inside method: " + x);
    }

    public static void main(String[] args) {
        Test obj = new Test();
        obj.modify(obj.x);
        System.out.println("Outside method: " + obj.x);
    }
}
```

- a) Inside method: 15, Outside method: 10
- b) Inside method: 15, Outside method: 15
- c) Compilation Error
- d) None

188. What will be printed?

```
public class Demo {
    int a = 5;

    void modify(Demo d) {
        d.a *= 2;
    }

    public static void main(String[] args) {
        Demo obj = new Demo();
        obj.modify(obj);
```

```
        System.out.println(obj.a);
    }
}
```

- a) 5
- b) 10
- c) Compilation Error
- d) None

189. Identify the output:

```
public class Example {
    int val = 100;

    void change() {
        val /= 2;
    }

    public static void main(String[] args) {
        Example obj = new Example();
        obj.change();
        System.out.println(obj.val);
    }
}
```

- a) 100
- b) 50
- c) Compilation Error
- d) None

190. What will be the result?

```
public class Test {
    int num = 8;

    void doubleValue() {
        num *= 2;
    }

    public static void main(String[] args) {
        Test obj = new Test();
        obj.doubleValue();
        System.out.println(obj.num);
    }
}
```

- a) 8
- b) 16
- c) Compilation Error
- d) None

191. What will be printed?

```
public class Check {
    int x = 50;

    void increment() {
        x += 5;
    }

    public static void main(String[] args) {
        Check obj = new Check();
        obj.increment();
        System.out.println(obj.x);
    }
}
```

- a) 50
- b) 55
- c) Compilation Error
- d) None

192. What is the output?

```
public class Sample {
    int val = 15;

    void modify(Sample s) {
        s.val += 10;
    }

    public static void main(String[] args) {
        Sample obj = new Sample();
        obj.modify(obj);
        System.out.println(obj.val);
    }
}
```

- a) 15
- b) 25
- c) Compilation Error
- d) None

193. What will be printed?

```
public class Test {
    int a = 5, b = 3;

    void swap() {
        int temp = a;
        a = b;
        b = temp;
    }

    public static void main(String[] args) {
        Test obj = new Test();
```

```
        obj.swap();
        System.out.println(obj.a + " " + obj.b);
    }
}
```

- a) 5 3
- b) 3 5
- c) Compilation Error
- d) None

194. Identify the output:

```
public class Example {
    int num = 12;

    void check() {
        if (num % 2 == 0) {
            System.out.println("Even");
        } else {
            System.out.println("Odd");
        }
    }

    public static void main(String[] args) {
        Example obj = new Example();
        obj.check();
    }
}
```

- a) Even
- b) Odd
- c) Compilation Error
- d) None

195. What will be the result?

```
public class Test {
    int num = 9;

    void check() {
        System.out.println((num > 5) ? "Greater" : "Smaller");
    }

    public static void main(String[] args) {
        Test obj = new Test();
        obj.check();
    }
}
```

- a) Greater
- b) Smaller
- c) Compilation Error
- d) None

196. Identify the output:

```
public class Sample {
    int val = 50;

    void decrease() {
        val -= 20;
    }

    public static void main(String[] args) {
        Sample obj = new Sample();
        obj.decrease();
        System.out.println(obj.val);
    }
}
```

- a) 30
- b) 50
- c) Compilation Error
- d) None

197. What will be printed?

```
public class Example {
    int a = 10, b = 5;

    void add() {
        System.out.println(a + b);
    }

    public static void main(String[] args) {
        Example obj = new Example();
        obj.add();
    }
}
```

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

198. Identify the result:

```
public class Test {
    int x = 7, y = 2;

    void divide() {
        System.out.println(x / y);
    }

    public static void main(String[] args) {
        Test obj = new Test();
        obj.divide();
```

```
    }
}
```

- a) 3
- b) 3.5
- c) Compilation Error
- d) None

199. What will be printed?

```
public class Check {
    int a = 8, b = 3;

    void mod() {
        System.out.println(a % b);
    }

    public static void main(String[] args) {
        Check obj = new Check();
        obj.mod();
    }
}
```

- a) 2
- b) 3
- c) Compilation Error
- d) None

200. What is the output?

```
public class Example {
    int num = 6;

    void multiply() {
        num *= 3;
    }

    public static void main(String[] args) {
        Example obj = new Example();
        obj.multiply();
        System.out.println(obj.num);
    }
}
```

- a) 18
- b) 6
- c) Compilation Error
- d) None

---

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

```
public class Test {
    static int x = 10;
```

```
    int y = 20;

    void modify() {
        x += 5;
        y += 5;
    }

    public static void main(String[] args) {
        Test obj1 = new Test();
        obj1.modify();
        Test obj2 = new Test();
        System.out.println(obj2.x + " " + obj2.y);
    }
}
```

- a) 10 20
- b) 15 20
- c) 15 25
- d) 10 25

202. What will be printed?

```
public class Example {
    static int num = 100;

    int increment() {
        return num += 10;
    }

    public static void main(String[] args) {
        Example obj = new Example();
        System.out.println(obj.increment());
    }
}
```

- a) 100
- b) 110
- c) 120
- d) Compilation Error

203. What will be printed?

```
public class Demo {
    int a = 5;
    static int b = 10;

    int calculate() {
        return a + b;
    }

    public static void main(String[] args) {
        Demo obj = new Demo();
        System.out.println(obj.calculate());
```

```
    }
}
```

- a) 15
- b) 5
- c) Compilation Error
- d) None

204. What is the output?

```
public class Test {
    static int a = 5;

    static boolean checkEven() {
        return (a % 2 == 0);
    }

    public static void main(String[] args) {
        System.out.println(checkEven() ? "Even" : "Odd");
    }
}
```

- a) Even
- b) Odd
- c) Compilation Error
- d) None

205. What will be printed?

```
public class Example {
    int a = 3, b = 2;

    int multiply() {
        return a * b;
    }

    public static void main(String[] args) {
        Example obj = new Example();
        System.out.println(obj.multiply());
    }
}
```

- a) 6
- b) 5
- c) Compilation Error
- d) None

206. What is the output?

```
public class Sample {
    int a = 10;

    int check() {
```

```
        return (a > 5) ? a * 2 : a - 2;
    }

    public static void main(String[] args) {
        Sample obj = new Sample();
        System.out.println(obj.check());
    }
}
```

- a) 20
- b) 8
- c) 10
- d) Compilation Error

207. What is the output?

```
public class Test {
    static int x = 8;

    int square() {
        return x * x;
    }

    public static void main(String[] args) {
        Test obj = new Test();
        System.out.println(obj.square());
    }
}
```

- a) 8
- b) 64
- c) Compilation Error
- d) None

208. What is the output?

```
public class Check {
    double num = 9.5;

    int getIntValue() {
        return (int) num;
    }

    public static void main(String[] args) {
        Check obj = new Check();
        System.out.println(obj.getIntValue());
    }
}
```

- a) 9.5
- b) 9
- c) Compilation Error
- d) None

209. What will be printed?

```
public class Test {
    boolean isGreater(int a, int b) {
        return a > b;
    }

    public static void main(String[] args) {
        Test obj = new Test();
        System.out.println(obj.isGreater(10, 5));
    }
}
```

- a) true
- b) false
- c) Compilation Error
- d) None

210. What is the output?

```
public class Example {
    int x = 5;

    void modify(Example e) {
        e.x *= 2;
    }

    public static void main(String[] args) {
        Example obj = new Example();
        obj.modify(obj);
        System.out.println(obj.x);
    }
}
```

- a) 5
- b) 10
- c) Compilation Error
- d) None

211. What will be printed?

```
public class Test {
    int x = 10;

    void modify(int x) {
        x += 5;
        System.out.println("Inside method: " + x);
    }

    public static void main(String[] args) {
        Test obj = new Test();
        obj.modify(obj.x);
```

```
        System.out.println("Outside method: " + obj.x);
    }
}
```

- a) Inside method: 15, Outside method: 10
- b) Inside method: 15, Outside method: 15
- c) Compilation Error
- d) None

212. What is the output?

```
public class Example {
    static int num = 5;

    void increment() {
        num++;
    }

    public static void main(String[] args) {
        Example obj1 = new Example();
        Example obj2 = new Example();
        obj1.increment();
        System.out.println(obj2.num);
    }
}
```

- a) 5
- b) 6
- c) Compilation Error
- d) None

213. What is the output?

```
public class Check {
    int a = 5, b = 3;

    void swap() {
        int temp = a;
        a = b;
        b = temp;
    }

    public static void main(String[] args) {
        Check obj = new Check();
        obj.swap();
        System.out.println(obj.a + " " + obj.b);
    }
}
```

- a) 5 3
- b) 3 5
- c) Compilation Error
- d) None

214. What is the output?

```
public class Test {
    int num = 9;

    void check() {
        System.out.println((num > 5) ? "Greater" : "Smaller");
    }

    public static void main(String[] args) {
        Test obj = new Test();
        obj.check();
    }
}
```

- a) Greater
- b) Smaller
- c) Compilation Error
- d) None

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

```
public class Test {
    static int x = 10;

    void modify(int x) {
        this.x += x;
    }

    public static void main(String[] args) {
        Test obj1 = new Test();
        obj1.modify(5);
        Test obj2 = new Test();
        System.out.println(obj2.x);
    }
}
```

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

216. What is the output?

```
public class Example {
    int a = 10;

    void update(int a) {
        this.a = a + this.a;
    }

    public static void main(String[] args) {
```

```
        Example obj = new Example();
        obj.update(5);
        System.out.println(obj.a);
    }
}
```

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

217. What will be printed?

```
public class Test {
    static int num = 20;

    void change() {
        num -= 5;
    }

    public static void main(String[] args) {
        Test obj1 = new Test();
        obj1.change();
        Test obj2 = new Test();
        System.out.println(obj2.num);
    }
}
```

- a) 20
- b) 15
- c) Compilation Error
- d) None

218. What is the output?

```
public class Demo {
    static boolean check(int a) {
        return (a % 2 == 0);
    }

    public static void main(String[] args) {
        System.out.println(check(4) ? "Even" : "Odd");
    }
}
```

- a) Even
- b) Odd
- c) Compilation Error
- d) None

219. What is the output?

```
public class Test {
    int x = 100;

    void update(int x) {
        x = x + 10;
    }

    public static void main(String[] args) {
        Test obj = new Test();
        obj.update(obj.x);
        System.out.println(obj.x);
    }
}
```

- a) 100
- b) 110
- c) Compilation Error
- d) None

220. What will be printed?

```
public class Example {
    int a = 5;

    void modify(Example obj) {
        obj.a *= 2;
    }

    public static void main(String[] args) {
        Example obj = new Example();
        obj.modify(obj);
        System.out.println(obj.a);
    }
}
```

- a) 5
- b) 10
- c) Compilation Error
- d) None

221. What will be the result?

```
public class Test {
    static int a = 5;

    static int add(int x) {
        return a + x;
    }

    public static void main(String[] args) {
        System.out.println(add(10));
```

```
    }
}
```

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

222. What is the output?

```
public class Example {
    int a = 7;

    boolean isPositive() {
        return a > 0;
    }

    public static void main(String[] args) {
        Example obj = new Example();
        System.out.println(obj.isPositive());
    }
}
```

- a) true
- b) false
- c) Compilation Error
- d) None

223. What is the output?

```
public class Demo {
    int num = 25;

    String check() {
        return (num % 2 == 0) ? "Even" : "Odd";
    }

    public static void main(String[] args) {
        Demo obj = new Demo();
        System.out.println(obj.check());
    }
}
```

- a) Even
- b) Odd
- c) Compilation Error
- d) None

224. What will be printed?

```
public class Test {
    int x = 5;
```

```
    void modify(int y) {
        x = y * 2;
    }

    public static void main(String[] args) {
        Test obj = new Test();
        obj.modify(4);
        System.out.println(obj.x);
    }
}
```

- a) 5
- b) 8
- c) 4
- d) Compilation Error

225. What is the output?

```
public class Example {
    static int a = 10;

    static void update() {
        a += 5;
    }

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

- a) 10
- b) 15
- c) Compilation Error
- d) None

226. What will be printed?

```
public class Demo {
    int a = 3, b = 4;

    int sum() {
        return a + b;
    }

    public static void main(String[] args) {
        Demo obj = new Demo();
        System.out.println(obj.sum());
    }
}
```

- a) 7
- b) 3

- c) Compilation Error
- d) None

227. What is the output?

```
public class Test {
    int num = 9;

    void check() {
        System.out.println((num > 5) ? "Greater" : "Smaller");
    }

    public static void main(String[] args) {
        Test obj = new Test();
        obj.check();
    }
}
```

- a) Greater
- b) Smaller
- c) Compilation Error
- d) None

228. What will be the result?

```
public class Example {
    static int a = 6;

    static boolean isEven() {
        return a % 2 == 0;
    }

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

- a) true
- b) false
- c) Compilation Error
- d) None

229. What is the output?

```
public class Test {
    int x = 8;

    void modify(int x) {
        this.x = x * 2;
    }

    public static void main(String[] args) {
        Test obj = new Test();
```

```
        obj.modify(3);
        System.out.println(obj.x);
    }
}
```

- a) 8
- b) 6
- c) 3
- d) None

230. What will be printed?

```
public class Demo {
    int a = 10, b = 2;

    int divide() {
        return a / b;
    }

    public static void main(String[] args) {
        Demo obj = new Demo();
        System.out.println(obj.divide());
    }
}
```

- a) 5
- b) 2
- c) Compilation Error
- d) None