

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

```
Integer a = 100;  
int b = a + 10;  
System.out.println(b);
```

- A) 110
- B) Compilation error
- C) Runtime error
- D) NullPointerException

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

```
Integer x = 127;  
Integer y = 127;  
System.out.println(x == y);
```

- A) true
- B) false
- C) Compilation error
- D) Runtime error

3. What will be the output of this code?

```
Integer x = 128;  
Integer y = 128;  
System.out.println(x == y);
```

- A) true
- B) false
- C) Compilation error
- D) Runtime error

4. What is the default value of an Integer instance variable in a class?

- A) 0
- B) null
- C) Garbage value
- D) Compilation error

5. What happens if you execute the following code?

```
Integer x = null;  
int y = x;  
System.out.println(y);
```

- A) 0
- B) Compilation error
- C) Runtime error
- D) null

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

```
String str = "200";  
Integer num = Integer.valueOf(str);  
System.out.println(num);
```

A) 200

B) "200"

C) Compilation error

D) Runtime error

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

```
Integer a = new Integer(50);  
Integer b = new Integer(50);  
System.out.println(a == b);
```

A) true

B) false

C) Compilation error

D) Runtime error

8. What will be the output of this code?

```
Double d = 10.5;  
double val = d;  
System.out.println(val);
```

A) 10.5

B) Compilation error

C) 0.0

D) Runtime error

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

```
Float f = 12.5f;  
Integer i = f.intValue();  
System.out.println(i);
```

A) 12

B) 12.5

C) Compilation error

D) Runtime error

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

```
Character ch = 'A';  
System.out.println(Character.isLowerCase(ch));
```

A) true

B) false

C) Compilation error

D) Runtime error

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

```
Boolean b1 = new Boolean("True");  
Boolean b2 = new Boolean("true");  
System.out.println(b1 == b2);
```

- A) true
- B) false**
- C) Compilation error
- D) Runtime error

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

```
Boolean b1 = Boolean.valueOf("true");  
Boolean b2 = Boolean.TRUE;  
System.out.println(b1 == b2);
```

- A) true**
- B) false
- C) Compilation error
- D) Runtime error

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

```
Short s1 = 100;  
Short s2 = 100;  
System.out.println(s1 == s2);
```

- A) true
- B) false
- C) Compilation error**
- D) Runtime error

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

```
String str = "45.6";  
Double d = Double.parseDouble(str);  
System.out.println(d);
```

- A) 45.6**
- B) "45.6"
- C) Compilation error
- D) Runtime error

15. What happens if you execute the following code?

```
Byte b = 128;  
System.out.println(b);
```

- A) 128
- B) Compilation error**
- C) -128
- D) Runtime error

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

```
Float f = 10.5f;  
Double d = 10.5;  
System.out.println(f.equals(d));
```

- A) true
- B) false**
- C) Compilation error
- D) Runtime error

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

```
Character ch = '5';  
System.out.println(Character.isDigit(ch));
```

- A) true**
- B) false
- C) Compilation error
- D) Runtime error

18. Which of the following assignments is valid?

```
Long l = 100;
```

- A) Valid
- B) Compilation error**
- C) Runtime error
- D) Invalid due to type mismatch

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

```
Boolean b = new Boolean("TrUe");  
System.out.println(b);
```

- A) true**
- B) false
- C) Compilation error
- D) Runtime error

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

```
Integer i = 100;  
Double d = i * 2.0;  
System.out.println(d);
```

- A) 200.0**
- B) Compilation error
- C) 200
- D) Runtime error

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

```
Character ch = 'b';  
System.out.println(Character.toUpperCase(ch));
```

- A) b
- B) B**
- C) Compilation error
- D) Runtime error

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

```
Float f1 = 10.5f;  
Float f2 = 10.5f;  
System.out.println(f1 == f2);
```

- A) true
- B) false
- C) Compilation error
- D) Runtime error

23. What happens if you execute the following code?

```
Integer x = null;  
int y = x;  
System.out.println(y);
```

- A) 0
- B) Compilation error
- C) Runtime error
- D) null

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

```
Double d = 20.5;  
Integer i = d.intValue();  
System.out.println(i);
```

- A) 20
- B) 20.5
- C) Compilation error
- D) Runtime error

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

```
Character c = 'Z';  
System.out.println(Character.isUpperCase(c));
```

- A) true
- B) false
- C) Compilation error
- D) Runtime error

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

```
Integer i = 300;  
Integer j = 300;  
System.out.println(i.equals(j));
```

- A) true
- B) false
- C) Compilation error
- D) Runtime error

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

```
Byte b = new Byte("50");  
System.out.println(b);
```

A) 50

B) Compilation error

C) Runtime error

D) -50

28. What is the size of `Double` in Java?

A) 4 bytes

B) 8 bytes

C) 16 bytes

D) Platform-dependent

29. What will be the output of `Boolean.valueOf("False")`? A) true

B) false

C) Compilation error

D) Runtime error

30. What is the maximum value a `Short` can store?

A) 32,767

B) 65,535

C) 16,383

D) 131,071

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