

## NPTEL Online Certification Courses

# Indian Institute of Technology Kharagpur



### **PROGRAMMING IN JAVA**

## **Assignment 1**

TYPE OF QUESTION: MCQ

Number of questions: 10 Total mark:  $10 \times 1 = 10$ 

### **QUESTION 1:**

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

- a. int
- b. boolean
- c. String
- d. char

**Correct Answer: c** 

**Detailed Solution:** 

String is not a primitive data type.

### **QUESTION 2:**

Consider the following program.

### What is the output of the above code?

- a. 127
- b. -127
- c. 129
- d. 2

**Correct Answer: b** 

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#### **Detailed Solution:**

Range of byte data in java is -128 to 127. But the byte data type in java is cyclic in nature.

### **QUESTION 3:**

# Which of the following concept that Java doesn't support?

- a. inheritance
- b. encapsulation
- c. pointer
- d. array

**Correct Answer: c** 

**Detailed Solution:** 

Java does not support pointer.

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### **QUESTION 4:**

Which of the following is not a keyword in java?

- a. import
- b. super
- c. method
- d. class

**Correct Answer: c** 

### **Detailed Solution:**

Here, import, super and class are reserved keywords in Java, which cannot be used for naming a variable or class.





### **QUESTION 5:**

### Consider the following program.

# What will be the output of the program if it is executed?

- a. 12 20 13
- b. 12 20 15
- c. 12 20 015
- d. 12 20 F

#### Correct Answer: a

#### **Detailed Solution:**

015 is an octal number, its equivalent decimal number is 13.





# **QUESTION 6:**

# Match the following java terms with their descriptions?

A. JDK	1. A software development kit that provides all the necessary tools and libraries to develop, compile, and run Java applications.
B. JRE	2. A software package that provides the necessary runtime environment for executing Java applications.
C. JVM	3. An abstract machine that executes java bytecode.

## Choose the correct option.

a. A-1, B-2, C-3

b. A-2, B-3, C-1

c. A-3, B-2, C-1

d. A-3, B-1,C-2

**Correct Answer: a** 

**Detailed Solution:** 

Option a is correct.





## **QUESTION 7:**

## Consider the following program.

```
public class Question{
    public static void main(String[] args){
        short x = 20;
        x = x * 2;
        System.out.print(x);
    }
}
```

# What will be the output of the program if it is executed?

- a. 20
- b. 2
- c. Compiler error
- d. 40

#### **Correct Answer: c**

### **Detailed Solution:**

This will give compile error - "Lossy conversion from int to short".





## **QUESTION 8:**

What is the output of the following code?

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

- a. null
- b. true
- c. false
- d. 1

**Correct Answer: c** 

### **Detailed Solution:**

Test by run.

### **QUESTION 9:**

Which program is used to compile Java source code into bytecode?

- a. javap
- b. javac
- c. java
- d. javad

#### **Correct Answer: b**

#### **Detailed Solution:**

The JDK includes a tool, 'javac' that compiles from Java source code to a target of Java bytecodes. The program 'java' is used to execute Java bytecode. Note that there is no program like 'javap' and 'javad'.





# **QUESTION 10:**

Consider the following program.

```
public class Question{
    public static void main(String[] args) {
        int x = 5;
        x *= (2 + 8);
        System.out.println(x);
    }
}
```

What will be the output of the program if it is executed?

- a. 50
- b. 10
- c. Compiler error
- d. 5

Correct Answer: a

**Detailed Solution:** 

Here,  $x^* = 2 + 8$  is equivalent to  $x^* (2+8) = x^* 10$ . Therefore, x = 50.

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