

CLASS -10 (2025-26)

INPUT IN JAVA

CHAPTER 5

Assignments:-

A. Tick (✓) the correct answer

Question 1. Which of the following types of error will the following code give?

```
for(int i=1;i>10;i++)
```

- a. Syntax
- b. Runtime
- c. Logical
- d. None of these

Answer:- c. Logical

Question 2. The statement `Scanner sc = new Scanner(System.in);` will give a/an ____ error.

- a. Syntax
- b. Runtime
- c. Logical
- d. None of these

Answer:- a. Syntax

Explanation:

The class name `Scanner` is case-sensitive in Java. Writing `scanner` with a lowercase 's' causes a **syntax error** because Java doesn't recognize it as a valid class name. The correct syntax should be:

```
Scanner sc = new Scanner(System.in);
```

Question 3. are non-executable statements used to explain the code.

- a. Comments
- b. Errors
- c. Logical
- d. None

Answer:- a. Comments

Question 4. Which of the following is not used to write a comment?

- a. `/**`
- b. `//`
- c. `/`
- d. `/*`

Answer:- c. /

Question 5. Which of the following is used to input a float value using Scanner class?

- a. `next()`
- b. `nextInt()`
- c. `nextDouble()`
- d. `nextFloat()`

Answer:- d. `nextFloat()`

B. Fill in the blanks

Question 1. Forgetting to put a semicolon at the end of a statement is a type error.

Answer:- Syntax

Question 2. An is a situation in which the execution of a program stops abnormally.

Answer:- Exception



Question 3. errors are also called semantic errors.

Answer:- Logical

Question 4. comments begin with /* and end with */.

Answer:- Multiline

Question 5. We use arguments to input values in String format in the main() method.

Answer:- String[] args

C. Short Answer Type Questions

Question 1. What is the difference between multiline comments and documentation comments?

Answer:- Multiline comments /*...*/ are used to comment out multiple lines, while documentation comments /**...*/ are used to generate official documentation using javadoc.

Question 2. Write the syntax to input a Short type value using the Scanner class.

Answer:-

```
Scanner sc = new Scanner(System.in);  
short value = sc.nextShort();
```

Question 3. What are the three types of errors?

Answer:- Syntax error, Runtime error, and Logical error.

Question 4. Define logical error. Give an example.

Answer:- A logical error occurs when the program compiles and runs but gives the wrong output.

Example: Calculating average as total / number + 2 instead of (total + 2)/number.

Question 5. Write the difference between try and catch.

Answer:- The try block contains code that might throw an exception. The catch block handles the exception.

D. Assertion and Reasoning Based Question

Question 1.

Assertion (A): A package is a collection of Java classes and other packages having similar functionality.

Reason (R): Each class within a package cannot use the public properties and behaviours of other classes.

- a. Both A and R are true, and R is the correct explanation of A.
- b. Both A and R are true, but R is not the correct explanation of A.
- c. A is true, but R is false.
- d. A is false, but R is true.

Answer:- c. A is true, but R is false.

Some extra Questions and Answers

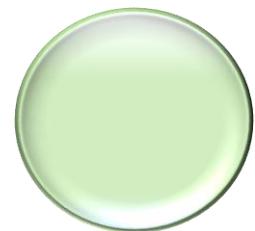
Question 1: What will happen if we write:

```
scanner sc = new Scanner(System.in);
```

Options:

- a. Runtime error
- b. Logical error
- c. Syntax error
- d. No error

Answer:- c. Syntax error



Explanation: Java is case-sensitive. `scanner` with a small 's' is not a valid class name. The correct class name is `Scanner`.

Question 2:

Which of the following will **definitely** cause a **runtime error** if executed without user input?

```
Scanner sc = new Scanner(System.in);  
int x = sc.nextInt();
```

Options:

- a. If user types a number
- b. If user types a float value
- c. If user types a string
- d. If user types whitespace

Answer:- c. If user types a string

Explanation: `nextInt()` expects an integer. Typing a string causes `InputMismatchException` at runtime.

Question 3:

What type of error is caused by the code below?

```
int x = 10;  
System.out.println("Result: " + x / 0);
```

Options:

- a. Syntax error
- b. Runtime error
- c. Logical error
- d. No error

Answer:- b. Runtime error

Explanation: Division by zero leads to `ArithmaticException` during program execution.

Question 4:

Which of the following is **not** a valid way to write a comment in Java?

Options:

- a. // This is a comment
- b. /* This is a comment /
- c. /* This is a documentation comment */
- d. / This is a comment /

Answer:- d. / This is a comment /

Explanation: This is not a valid syntax. A single slash / is not recognized as a comment indicator.

Question 5:

What does the following code print if the user enters 5 and 3?

```
Scanner sc = new Scanner(System.in);  
int a = sc.nextInt();  
int b = sc.nextInt();  
System.out.println((a > b) ? a : b);
```

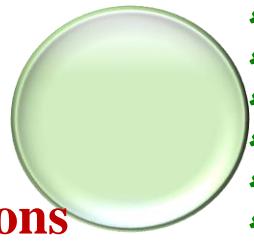
Options:

- a. 3
- b. 5
- c. a
- d. b

Answer:- b. 5

Explanation: The ternary operator returns the greater of the two values.

Primitive Data Types – Keyboard Input Questions





Question 1:

Which method is used to input an integer value in Java using the Scanner class?

Options:

- a. next()
- b. nextInt()
- c. nextInteger()
- d. readInt()

Answer:- b. nextInt()

Question 2:

Which Scanner method is used to input a float value?

Options:

- a. nextFloat()
- b. nextDouble()
- c. nextReal()
- d. nextFlt()

Answer:- a. nextFloat()

Question 3:

Which method is used to input a boolean value (true/false)?

Options:

- a. next()
- b. nextBoolean()
- c. nextBool()
- d. readBoolean()

Answer:- b. nextBoolean()

Question 4:

Which method of Scanner is used to input a byte value?

Options:

- a. nextByte()
- b. nextSmall()
- c. byte()
- d. getByte()

Answer:- a. nextByte()

Question 5:

Which Scanner method allows input of a single word (string without space)?

Options:

- a. nextString()
- b. next()
- c. nextLine()
- d. get()

Answer:- b. next()

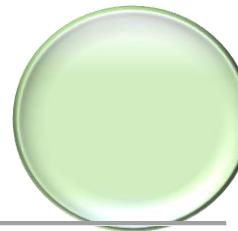
Question 6:

Which Scanner method is used to input an entire line including spaces?

Options:

- a. nextWord()
- b. readLine()
- c. next()
- d. nextLine()

Answer:- d. nextLine()



Question 7:

How do you input a `short` value using Scanner?

Options:

- a. `nextInt()`
- b. `nextByte()`
- c. `nextShort()`
- d. `nextSmall()`

Answer:- c. `nextShort()`

Question 8:

Which Scanner method is used to input a double value?

Options:

- a. `nextFloat()`
- b. `nextDouble()`
- c. `nextReal()`
- d. `nextDecimal()`

Answer:- b. `nextDouble()`

Question 9:

Which primitive data type does `nextLong()` help to input?

Options:

- a. `float`
- b. `long`
- c. `double`
- d. `int`

Answer:- b. `long`

Question 10:

Which method would best input a character using Scanner?

Options:

- a. `nextChar()`
- b. `next().charAt(0)`
- c. `nextCharacter()`
- d. `readChar()`

Answer:- b. `next().charAt(0)`

Non-Primitive Data Types – Keyboard Input Questions

Question 11:

How can you input a `String` in Java using Scanner that includes spaces?

Options:

- a. `next()`
- b. `readString()`
- c. `nextLine()`
- d. `scanString()`

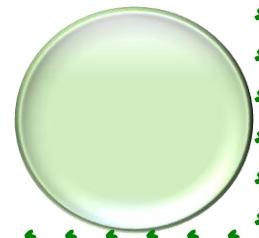
Answer:- c. `nextLine()`

Question 12:

Which of the following is **not** a primitive data type?

Options:

- a. `int`
- b. `String`
- c. `float`



d. boolean

Answer:- b. String

Question 13:

What is the data type of `Scanner sc = new Scanner(System.in);`?

Options:

- a. Primitive
- b. Non-primitive
- c. Keyword
- d. Operator

Answer:- b. Non-primitive

Question 14:

Which Java package must be imported to use the Scanner class?

Options:

- a. `java.input.Scanner`
- b. `java.io`
- c. `java.util`
- d. `java.lang`

Answer:- c. `java.util`

Short answer questions with answers

Question 1.

Which class is commonly used in Java to take keyboard input from the user?

Answer:- Scanner class.

Question 2.

Which package must be imported to use the Scanner class in Java?

Answer:- `java.util` package.

Question 3.

Write the syntax to create a Scanner object.

Answer:- `Scanner sc = new Scanner(System.in);`

Question 4.

How do you input an integer value using Scanner?

Answer:- `int num = sc.nextInt();`

Question 5.

How can you input a string that includes spaces using the Scanner class?

Answer:- `String text = sc.nextLine();`

Question 6.

Write the code to input a float value using Scanner.

Answer:- `float f = sc.nextFloat();`

Question 7.

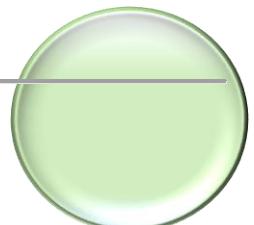
How can you input a single character using Scanner?

Answer:- `char ch = sc.next().charAt(0);`

Question 8.

What is the Scanner method to read a boolean value?

Answer:- `nextBoolean()`



Question 9.

What is the purpose of `System.in` in the `Scanner` object?

Answer:- It represents the standard input stream (keyboard input).

Question 10.

Can the `Scanner` class be used to input non-primitive data types like `String`?

Answer:- Yes, using `next()` or `nextLine()` methods.

