INTRODUCTION TO JAVA

LECTURE 2 : GETTING STARTED WITH JAVA

(Size of long)

1. Primitive data type 'long' is having size _____ byte(s) in Java Programming.

8

SOLUTION DESCRIPTION:

The size of long is 8 bytes in Java.

(Datatype)

2. Which of the following data type stores longest decimal number ?

a) long

b) float

c) double

d) short

SOLUTION DESCRIPTION:

Out of all given options, only float and double can hold decimal numbers. Size of the float is 4 bytes and double is 8 bytes (in most of the compilers, as the size of data types is compiler specific). So double can store bigger decimal numbers.

(Boolean Variable)

3. Which of these values can be assigned to a boolean variable in Java?

a) 0 or 1

b) Any integer value.

c) true or false

d) Both options a and c

SOLUTION DESCRIPTION:

Boolean variable in java can only hold either true or false value.

(Valid Variable Name)

4. Which of these is a valid variable name ?

a) 1var

b) var1

c) var@1

d) 2_var

SOLUTION DESCRIPTION:

In java, you cannot start your variable name with numbers and also they cannot contain any other special character except underscore (_) and dollar ($).

(Uninitialized Local Variable)

5. Compiler never assigns a default value to an uninitialized local variable in Java Programming. Whether this statement is true or false ?

a) True

b) False

SOLUTION DESCRIPTION:

In java, its compulsory to initialise any local variable before using it because compiler don't assign any default/garbage value to variables.

(Predict the output)

6. What is the output of the following code if the input is : 5 10 ?

```
Scanner s = new Scanner(System.in);
int a = s.nextInt();
int b = s.nextInt();
```

```
System.out.println(a+b);
```

a) 5

b) 10

c) 15

d) Error

SOLUTION DESCRIPTION:

"s.nextInt()" scans and returns the next token as int. A token is part of entered line that is separated from other tokens by space, tab or newline. So when input line is : “5 10”, then s.nextInt() returns the first token i.e. “5” as int and s.nextInt() again returns the next token i.e. “10” as int

(Predict The String output)

7. What is the output of the following code if the input string is "Coding Ninjas"?

```
Scanner s = new Scanner(System.in);
String str;
str = s.next();
System.out.print(str);
```

a) Coding Ninjas

b) Coding

c) Ninjas

d) The above code fragment does not compile

SOLUTION DESCRIPTION:

"s.next()" returns the next token as String. A token is part of entered line that is separated from other tokens by space, tab or newline. So when input line is - “Coding Ninjas” then s.next() returns the first token i.e. “Coding”

(Multiple inputs)

8. What is the output of the following code if input is :

```
10 abc def

Scanner s = new Scanner(System.in);
int a = s.nextInt();
String str = s.next();
System.out.print(a);
System.out.println(str);
```

a) 10 abc def

b) 10abc

c) 10abcdef

d) 10 abc

SOLUTION DESCRIPTION:

"s.nextInt()" scans and returns the next token as int. A token is part of entered line that is separated from other tokens by space, tab or newline. So when input line is - “10 abc def” then s.nextInt() returns the first token as int i.e. “10” and s.next() returns the next token "abc”.

While printing, in first statement a is printed and then str. There is no space or nextline between both print. Hence output is : 10abc.

(Integer and String)

9. What is the output of the following code if input is : abc def 10

```
Scanner s = new Scanner(System.in);
String str = s.next();
int a = s.nextInt();
System.out.print(str + " " + a);
```

a) abc def 10

b) abc 10

c) InputMismatchException

d) abc InputMismatchException

SOLUTION DESCRIPTION:

"s.next()" scans and returns the next token as String. A token is part of entered line that is separated from other tokens by space, tab or newline. So when input line is - “abc def 10” then s.next() returns the first token as String i.e. “abc” and s.nextInt() tries to convert the next token i.e. “def” into an int, which gives InputMismatchException.

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