

Core Java: Part 1

Which of the following are keywords in Java programming language

- ..a) public
- ..b) static
- ..c) void
- ...d) main
- e) scope

Consider the code

```
private static void printTotal(int i, int j) {  
    int sum = i + j;  
    System.out.println("This program performs addition " +  
        "using two numbers supplied.");  
    System.out.println("The two numbers and the sum: " +  
        i + " + " + j + " = " + sum);  
}
```

In the above code which of the following define local variables:

- a) i, j only.
- b) sum only.
- c) i, j and sum.
- d) There are no local variables.

Which of the following are correct regarding Java variables

- a) The default value for boolean variable is: true.
- b) A literal and a variable are the same.
- c) This is a valid variable declaration: `int _52 = 52;`
- d) This is a valid instance variable declaration: `int i, j = 10;`

Consider the code:

```
// This program prints text and an integer number.  
public class YearPrinter {  
    public static void main(String [] args) {  
        int year= 2013;
```

```
System.out.println("This year is: " + year);  
}  
}
```

Which of the following are correct of the above code:

- a) “year” is a numeric variable.
- b) ‘System.out.println(“This year is: ” + year);’ is a statement.
- c) “YearPrinter” is the name of a class.
- d) “main” is the name of a method.
- e) “//” is used to write a comment within a class.

Q 5 : Which of the following code snippets correctly show statement “blocks”

a.

```
public int calculate(int a, int b) {  
    int c = a + b;  
    System.out.println("a+b = " + c);  
    return c;  
}
```

b.

```
String a = "Java";  
String b = "programming";  
String c = "Java programming";  
if (c.equals(a + b)) {  
    System.out.println("Java programming"); // prints Java  
    programming  
}
```

c.

```
{  
    Object object = null;  
}
```

d.

```
Integer i = null;  
try {  
    i = new Integer("56");  
}  
catch (NumberFormatException nfe) {
```

```
nfe.printStackTrace();  
}
```

To create a Java application which of the following are required

- a) A source code file.
- b) Java programming language compiler.
- c) A text editor or an IDE.
- d) The Java application launcher.

Consider the code

```
public class YearPrinter {  
    public static void main(String [] args) {  
        new YearPrinter().printIt();  
    }  
    private void printIt() {  
        int year= 2013;  
        System.out.println("This year is: " + year);  
    }  
  
}
```

Which one of the following is correct after the above is compiled and run:

- a) There is a compile time error.
- b) The program prints “The year is: 2013”.
- c) There is a runtime error.

Consider the code

```
package mypackage;  
  
public class ClassA {  
    public static void main(String [] args) {  
        new ClassA().doThis();  
    }  
    public void doThis() {  
        System.out.println("Running the ClassA class.");  
    }  
}
```

Assume that the ClassA.java is in the current directory. And, all the Java commands are run from the current directory. Which of the following are correct:

- a) The command “javac -d . ClassA.java” at command prompt creates a directory called mypackage, and ClassA.class file within that directory.
- b) The above class can be run at the command prompt using the command “java mypackage.ClassA”.
- c) The above class can be run at the command prompt using the command “java ClassA”.
- d) The above class can be run at the command prompt using the command “java ClassA.class”.

The package and import statements must be specified before a class definition within a class file

True or false:

Consider the following two Java classes

ProgramA.java:

```
import java.util.ArrayList;
public class ProgramA {

    public static void main (String [] rrr) {
        ArrayList<String> list1 = new ArrayList<String>();
        list1.add("element 1");
        System.out.println("An element is added to the array
list.");
    }
}
```

ProgramB.java:

```
public class ProgramB {

    public static void main (String [] args) {
        java.util.ArrayList<String> list = new
        java.util.ArrayList<String>();
    }
}
```

```
list.add("element 1");  
System.out.println("An element is added to the array  
list.");  
}  
}
```

Which of the following are correct of the above two classes:

- a) Both ProgramA and ProgramB compile, run and print “An element is added to the arraylist.”.
- b) Only ProgramA compiles, runs and prints “An element is added to the arraylist.”.
- c) Only ProgramB compiles, runs and print “An element is added to the arraylist.”.
- d) Both ProgramA and ProgramB fail to compile and run.

Which of the following is not introduced with Java 8?

- a) Stream API
- b) Serialization
- c) Spliterator
- d) Lambda Expression

What is the purpose of BooleanSupplier function interface?

- a) represents supplier of Boolean-valued results
- b) returns Boolean-valued result
- c) There is no such function interface
- d) returns null if Boolean is passed as argument

What is the return type of lambda expression?

- a) String
- b) Object
- c) void

d) Function

Which is the new method introduced in java 8 to iterate over a collection?

- a) for (String i : StringList)
- b) foreach (String i : StringList)
- c) StringList.forEach()
- d) List.for()

What are the two types of Streams offered by java 8?

- a) sequential and parallel
- b) sequential and random
- c) parallel and random
- d) random and synchronized

Which feature of java 8 enables us to create a work stealing thread pool using all available processors at its target?

- a) workPool
- b) newWorkStealingPool
- c) threadPool
- d) workThreadPool

What does Files.lines(Path path) do?

- a) It reads all the files at the path specified as a String
- b) It reads all the lines from a file as a Stream
- c) It reads the filenames at the path specified
- d) It counts the number of lines for files at the path specified

What is Optional object used for?

- a) Optional is used for optional runtime argument
- b) Optional is used for optional spring profile

- c) Optional is used to represent null with absent value
- d) Optional means it's not mandatory for method to return object

What is the substitute of Rhino javascript engine in Java 8?

- a) Nashorn
- b) V8
- c) Inscript
- d) Narcissus

What does SAM stand for in the context of Functional Interface?

- a) Single Ambivalue Method
- b) Single Abstract Method
- c) Simple Active Markup
- d) Simple Abstract Markup