

SCJP 1.5 eBook

Sun Certified Java Programmer (SCJP 1.5)

Copyright © 2008 by www.javabeat.net

1) Which of the following statements hold true in the following program?

```
package generics;
import java.util.ArrayList;
import java.util.List;
public class Ques04 {
    public static void main(String[] args) {
        List<? extends Instrument> allInstruments = new ArrayList<Instrument>();
        // -->X
        allInstruments.add(new Guitar());
        allInstruments.add(new Violin());
    }
}
interface Instrument {
    public void play();
}
class Guitar implements Instrument {
    public void play(){
        System.out.println("Playing Guitar.");
    }
}
class Violin implements Instrument {
    public void play(){
        System.out.println("Playing Violin.");
    }
}
}
```

1. The program will not compile.
2. The program will compile but will throw run-time exception.
3. The statement 'X' manifests that objects of type Instrument as well as sub-types can be added to the list 'allInstruments'.
4. It is not possible to add any type of objects to the list 'allInstruments'.
5. The only possible element that can be added to the list 'allInstruments' is 'null'.

2) What will be the output of the following program?

```
package enums;
public enum Color {
    RED("Red Color"),
    GREEN("Blue Color"),
    BLUE("Blue Color");
    private String displayName;
    Color(String displayName){
        this.displayName = displayName;
    }
    public String toString(){
        return displayName;
    }
}

class ColorTest{
    public static void main(String[] args) {
        Color redColor = Color.RED;
        System.out.println(redColor);
        Color blueColor = Color.BLUE;
        System.out.println(blueColor);
    }
}
```

```
}  
}
```

1. The program will compile and the output will be 'Red Color' followed by 'Blue Color'.
2. The program will compile and throw a run-time exception.
3. The program won't compile as it is not possible to define methods within an Enum.

3) What will be the output of the following program?

```
package var_arg;  
  
public class VarArgTest1 {  
  
    public static void main(String[] args) {  
  
        acceptMultipleArguments(1);  
        acceptMultipleArguments(1, 2);  
    }  
  
    static void acceptMultipleArguments(var_arg int nums){  
        System.out.println(nums.length);  
    }  
}
```

1. The program will compile to produce the output 1 2.
2. The program will not compile
3. The program will compile but throw a run-time exception.
4. The program will output 1 1.

4) Imagine that you have directory called test1 in C drive containing some files, within which there is a directory called test2 (sub-directory of test1) containing some other set of files. Considering this, what statements are true about the following program?

```
package io;  
  
import java.io.File;  
import java.io.FileFilter;  
  
public class DirLister {  
  
    public static void main(String[] args) {  
  
        String path = "C:\\test1";  
        list(path);  
    }  
  
    static void list(String path){  
  
        File fileObject = new File(path);  
        if (fileObject.exists()){  
            if (fileObject.isDirectory()){  
                System.out.println("Dir-->" + fileObject.getAbsolutePath());  
                File allFiles[] = fileObject.listFiles(new MyFileLister());  
                for (File aFile : allFiles){  
                    list(aFile.getAbsolutePath());  
                }  
            }else{
```

```

        System.out.println("File-->" + fileObject.getAbsolutePath());
    }
}
}

```

```

class MyFileLister implements FileFilter{

    @Override
    public boolean accept(File pathname) {
        return pathname.getAbsolutePath().endsWith(".bmp");
    }

}

```

1. The program will list down all the files within the directory test1 and test2
2. The program will list down only the files in directory test1
3. The program will list down only the files in directory test2
4. The program will run infinitely.

5) What will be the output of the following program?

```

package wrapper_boxing;

public class WrapperTest2 {

    public static void main(String[] args) {

        Boolean bool1 = new Boolean(true);
        Boolean bool2 = new Boolean(false);
        Boolean bool3 = new Boolean("false");
        Boolean bool4 = new Boolean(bool1);

        System.out.println(bool1.equals(bool4));
        System.out.println(bool2 == bool3);
        System.out.println(bool1 == bool4);

    }

}

```

1. The program will not compile because the creation of bool4 object will cause compilation error.
2. The program will produce the output 'true false false'.
3. The program will produce the output 'true true true'.
4. The program will output 'true false true'.

6) What will be the output of the following program?

```

package misc_api;

import java.util.Scanner;

public class ScannerTest3 {

    public static void main(String[] args) {

        Scanner scanner = new Scanner("hello 1 2.00 false");
        scanner.useDelimiter(" ");

    }

}

```

```

String str = scanner.next();
int anInt = scanner.nextInt();
float aFloat = scanner.nextFloat();
boolean booleanValue = scanner.nextBoolean();

System.out.println(str + ":" + anInt + ":" + aFloat + ":" + booleanValue);
}
}

```

1. The program will output 'hello:1:2.0:false'
2. The program will throw Input Mismatch exception at the run-time
3. The program will output nothing.
4. The program will output ':1:2.0:false'

7) Which of the following statements are true about the new enhanced for loop?

1. The enhanced for loop eliminates the need for Iterator objects.
2. The enhanced for loop simplifies the process of iterating over a collection of elements
3. The introduction of enhanced for loop will bring performance bottle-necks in an Application
4. It is not possible to mix the older for loops as well as enhanced for loop in java source code of version 5.0

8) Assume that in the current directory test.txt file is already exist. What will happen when you execute the following code?

```

import java.io.*;
class Test
{
    public static void main(String args[])
    {
        try
        {
            File file = new File("test.txt");
            file.createNewFile();
        }
        catch (IOException ex)
        {
            ex.printStackTrace();
        }
    }
}

```

- a) text.txt will be created and overwrite the old file
- b) file will not be created
- c) exception will be thrown
- d) none of the above.

9) What is the output of the following program?

```

public class Gen<G>
{
    G g;
    Gen(G g)
    {
        this.g =g;
    }
}

```

```

}
public static void main(String[] args)
{
    Gen<String> arr[] = new Gen[5];           //line 1
    arr[0] = new Gen("Java");               //line 2
    arr[1] = new Gen(1);                    //line 3
    arr[2] = (Gen<String>)new Gen(1);       //line 4
    arr[3] = (Gen<String>)new Gen<Integer>(1); //line 5
    for(Gen o:arr)
    {
        System.out.println(o);
    }
}
}

```

- a)Compile time Error at line 1
- b)Compile time Error at line 3
- c)Compile time Error at line 4
- d)Compile time Error at line 5
- e)Run Time Error

10) what is the output of compiling an running the following code?

```

import java.util.*;
class CheckTest {
    public static void main(String [] args) {
        Hashtable ht = new Hashtable<String, String>();
        ht.put("chec", "check");
        ht.put(1000, "check"); // line 1
        ht.put("check", 20.01); // line 2
        System.out.print(ht.get("chec") + " ");
        System.out.print(ht.get(1000) + " "); //line 3
        System.out.print(ht.get("check")); //line 4
    }
}

```

- a) Compilation fails due to error at line 1,2,3,4
- b) Compilation fails due to error at line 3,4
- c) Compiles fine and exception is thrown at runtime.
- d) Compiles fine and prints "check check 20.01"
- e) Compilation fails due to error at line 1,2

Answers

1) 1,5.

The declaration 'allInstruments' manifests a list, whose reference can point to a similar declaration of list holding Instrument objects or sub-class of Instrument objects. It is not possible to add elements into the list 'allInstruments'. The only permissible allowed type is 'null'.

2)1

The above program defines a Enum called Color and the Enum constants within are parameterized by defining a constructor for holding the display name of each constants. The method toString() is defined at the declaration level which means that when an Enum object is printed, this method will get called.

3) 2

The program won't compile as there is no keyword called 'var_arg' in Java

4) 1

The program recursively traverses over the directories and the files. Hence answer 1 holds good.

5) 2

The first comparison statement compares the value of two objects and hence will return true. Whereas the second and the third comparison verifies whether the references are pointing to the same object, in which case both the comparisons will fail.

6) 1

The output will be 'hello:1:2.0:false'.

7) 1,2

The program recursively traverses over the directories and the files. Hence answer 1 holds good.

8) c) file will not be created.

New file cannot be created, when the File object refers to an actual file name that already exists in the file system

9) d.

We can cast raw type to specific type but we cannot type cast Integer type to String type

10) d

d is the correct answer because even Hashtable reference is created with Generic type the reference is stored in non-generic variable. So it act as an old collection.

Buy JavaBeat Certification Kit for JUST Rs.200

400 Practice Questions for SCJP 1.5 Exam

<http://www.javabeat.net/products/cert/scjp-1-5.php>

contact us at sales@javabeat.net

(or)

directly talk to our sales support at **91-9886656774**