Cognizant Technology Solutions

Exception Exercise

CATP Java Team
5/20/2012

For The Associates:

The documents details two flavors of problem statements

- **Statement # 1:** Few problem solutions have been provided for associates should analyze the program and write down the program output. This will enhance the analyzing skills of associates and also understand "why" part of java programming feature. The associates can then try running the program in eclipse and check if the output with what they have written.
- **Stamen # 2:** There are some problem statements provided similar to the final assessment and associates need to solve it. This will enhance the programming skills of the associates. **IMPORTANT:** These exercises will gear you up for the core java assessment so please develop/analyze the exercise independently. In case you are stuck up reach out to the trainers.

Exercises:

1. What is the expected output of compiling and running the following code?

```
class AirPlane {
public AirPlane() throws IOException,
RuntimeException {
System.out.println("AirPlane");
}
}
class AirJet extends AirPlane { }
public class Tester {
public static void main(String args[]) throws IOException
{
new AirPlane();
}

}
```

2. Can a try and finally block work without a catch block?

3. What is the result of compiling and running the following code?

```
public class Tester {
static void method(){
throw new Exception();
}
public static void main(String[] args) {
try {
method();
} catch (Throwable e) {
try {
throw new Exception() ;
} catch (Exception ex) {
System.out.print("exception");
} finally {
System.out.print("finally");
}
}
}
```

4. What is the expected output?

```
class Father {
public Father() throws IOException {
System.out.print("Father");
throw new IOException();
}
}
class Son extends Father {
public Son() throws IOException {
System.out.print("Son");
}
}
public class Tester {
public static void main(String[] args) {
try {
new Son();
} catch (IOException e) {
System.out.print("Inside catch");
}
}
}
```

5. What is the result of compiling and running the following code?

```
public class Tester {
public static void main(String[] args) {
String stmt = "java 2009";
String[] arr = stmt.split(" ");
try {
int x = Integer.parseInt(arr[1]);
System.out.print(x);
} finally {
System.out.print("finally");
}
}
}
```

6. Create a class method which throws an AgeLimitException when an invalid age is entered as argument.

Class Name	AgeValidator
Method Name	validateAge
Method Description	Accepts an age and if the age is less than 18 throw an AgeLimitException
Argument	int age
Return Type	Void
Logic	Accepts an age if the age is less than 18 Throw an AgeLimitException

7. Create a class which accepts a number choice and returns the Month of the year. If the entered number is greater than 12 or less than 1 throw InvalidChoiceException. If the entered option is not a number throw NotANumberException.

Cass Name	CalculateMonth
Method Name	getMonth
Method Description	Accepts a user choice and return the month based on the choice
Argument	int option
Return Type	String : Month
Logic	Accepts a number from the user and returns the Month associated with it . For example 1 : January 2:February Etc If the entered number is greater than 12 or less than

	1 throw InvalidChoiceException.If the entered option is not a number throw NotANumberException.