Date:2023-11-02

Aim:

S.No: 27

Use inheritance to create an exception superclass called Exception A and exception subclasses Exception B and Exception C, where Exception B inherits from Exception A and Exception C inherits from Exception B. Write a java program to demonstrate that the catch block for type Exception A catches the exception of type Exception B and Exception C.

Note: Please don't change the package name.

Source Code:

q29793/TestException.java

```
package q29793;
import java.lang.*;
@SuppressWarnings("serial")
class ExceptionA extends Exception {
   String message;
   public ExceptionA(String message) {
      this.message = message;
   }
@SuppressWarnings("serial")
class ExceptionB extends ExceptionA {
//Write constructor of class ExceptionB with super()
ExceptionB(String message){
   super(message);
}
}
@SuppressWarnings("serial")
class ExceptionC extends ExceptionB {
//Write constructor of class ExceptionC with super()
ExceptionC(String message){
   super(message);
}
}
@SuppressWarnings("serial")
public class TestException {
   public static void main(String[] args) {
      try {
         getExceptionB();
      catch(ExceptionA ea) {
         System.out.println("Got exception from Exception B");
      }
      try {
         getExceptionC();
      catch(ExceptionA ea) {
         System.out.println("Got exception from Exception C");
```

```
}
  }
  public static void getExceptionB() throws ExceptionB {
      throw new ExceptionB("Exception B");
  public static void getExceptionC() throws ExceptionC {
      throw new ExceptionC("Exception C");
   }
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Got exception from Exception B
Got exception from Exception C