Aim:

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

```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