

Program 1:

//Write a program to demonstrate checked Exception Handling using nested try, //catch statements.

```
class Exp6_1 {

    // main method
    public static void main(String args[])
    {
        // Main try block
        try {

            // initializing array
            int a[] = { 1, 2, 3, 4, 5 };

            // trying to print element at index 5
            System.out.println(a[5]);

            // try-block2 inside another try block
            try {

                // performing division by zero
                int x = a[2] / 0;
            }
            catch (ArithmeticException e2) {
                System.out.println("division by zero is not possible");
            }
        }
        catch (ArrayIndexOutOfBoundsException e1) {
            System.out.println("ArrayIndexOutOfBoundsException");
            System.out.println("Element at such index does not exists");
        }
    }
    // end of main method
}
```

Output:

```
Microsoft Windows [Version 10.0.19042.662]
(c) 2020 Microsoft Corporation. All rights reserved.

D:\College\JAVA\Experiments\Exp6>javac Exp6_1.java

D:\College\JAVA\Experiments\Exp6>java Exp6_1
ArrayIndexOutOfBoundsException
Element at such index does not exists

D:\College\JAVA\Experiments\Exp6>
```

Program 2:

```
/**
Write a Java Program to Create Account with 1000 Rs Minimum Balance,
Deposit Amount, Withdraw Amount and Also Throws LessBalanceException.
It has a Class Called LessBalanceException Which returns the Statement that
Says WithDraw Amount(_Rs) is Not Valid. It has a Class Which Creates 2
Accounts, Both Account Deposit Money and One Account Tries to
WithDraw more Money Which Generates a LessBalanceException. Take
Appropriate Action for the Same.
*/

import java.util.Scanner;

class LessBalanceException extends Exception{
    String msg;
    LessBalanceException(String msg){
        super(msg);
    }
}

public class Exp6_2 {
    public static void main(String[] args)throws LessBalanceException{
        double deposit_amount,withdraw_amount;
        Scanner sc=new Scanner(System.in);
```

```
try{
    System.out.println("Enter deposit amount");
    deposit_amount=sc.nextDouble();
    System.out.println("Enter Amount to be withdrawn");
    withdraw_amount=sc.nextDouble();
    if(deposit_amount<=1000)
        throw new LessBalanceException("Amount cannot be
withdrawn");
    else
    {
        System.out.println("Amount"+withdraw_amount+"\t
withdrawn successfully");
    }
}
catch(LessBalanceException ex){
    System.out.println(ex.getMessage());
}

}
```

Output:

```
D:\College\JAVA\Experiments\Exp6>javac Exp6_2.java

D:\College\JAVA\Experiments\Exp6>java Exp6_2
Enter deposit amount
2000
Enter Amount to be withdrawn
500
Amount500.0      withdrawn successfully

D:\College\JAVA\Experiments\Exp6>java Exp6_2
Enter deposit amount
1000
Enter Amount to be withdrawn
200
Amount cannot be withdrawn
```

Questions:

Question 1:

```
import java.util.Scanner;

class MarksOutOfBoundsException extends Exception{
    String msg;
    MarksOutOfBoundsException(String msg){
        super(msg);
    }
}

public class Questions {
    public static void main(String[] args)throws
        MarksOutOfBoundsException{
        double seatno, centre_num, marks;
        Scanner scanner=new Scanner(System.in);

        try{
            System.out.println("Enter your name:");
```

```

        String name=scanner.nextLine();

        System.out.println("Enter the seatno:");
        seatno=scanner.nextDouble();

        System.out.println("Enter the date:");
        String date=scanner.next();

        System.out.println("Enter the centre_num:");
        centre_num=scanner.nextDouble();

        System.out.println("Enter the marks:");
        marks=scanner.nextDouble();

        if(marks<0 || marks>100)
            throw new MarksOutOfBoundsException("Marks cannot be less than
zero or even cannot exceed 100");
        else{
            System.out.println("Details of Sem2");
            System.out.println("Name:"+name);
            System.out.println("Seatno:"+seatno);
            System.out.println("Date:"+date);
            System.out.println("Centre number:"+centre_num);
            System.out.println("Marks of sem 2:"+marks);

        }
    }
    catch(MarksOutOfBoundsException ex){
        System.out.println(ex.getMessage());
    }

    scanner.close();
}
}

```

Output:

```
D:\College\JAVA\Experiments\Exp6>javac Questions.java

D:\College\JAVA\Experiments\Exp6>java Questions
Enter your name:
Yash
Enter the seatno:
1234
Enter the date:
01-01-2020
Enter the centre_num:
789
Enter the marks:
90
Details of Sem2
Name:Yash
Seatno:1234.0
Date:01-01-2020
Centre number:789.0
Marks of sem 2:90.0

D:\College\JAVA\Experiments\Exp6>java Questions
Enter your name:
Yash
Enter the seatno:
1234
Enter the date:
01-01-2020
Enter the centre_num:
789
Enter the marks:
-12
Marks cannot be less than zero or even cannot exceed 100

D:\College\JAVA\Experiments\Exp6>|
```