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Course Name: C.S.E. (IoT CS BC)

Course code: CSL304

Year: S.E.

Semester: 3

Roll No.: 17

Experiment Evaluation Sheet

Experiment No.: 12

Experiment Name:
Program on Exception handling

Sr No.	Evaluation Criteria	Marks (Out of 9)	Performance Date	Correction Date and Signature of Instructor
1	Experiment Performance			
2	Journal Performance			
3	Punctuality			
Total				

Aim : Program on Exception handling

Software required : Java, Javac.

Theory :

Exception Handling in Java :-

The Exception Handling in Java is one of the powerful mechanism to handle the runtime errors so that the normal flow of the application can be maintained.

In this tutorial, we will learn about Java exceptions, it's types, and the difference between checked and unchecked exceptions.

What is Exception in Java?

Dictionary Meaning: Exception is an abnormal condition.

In Java, an exception is an event that disrupts the normal flow of the program. It is an object which is thrown at runtime.

What is Exception Handling?

Exception Handling is a mechanism to handle runtime errors such as ClassNotFoundException, IOException, SQLException, RemoteException, etc.

Code 12.a :

```
public class MultipleCatchBlock1 {
    public static void main(String[] args) {
        try{
            int a[]=new int[5];
            a[5]=30/0;
        }
        catch(ArithmeticException e)
        {
            System.out.println("Arithmetic Exception occurs");
        }
        catch(ArrayIndexOutOfBoundsException e)
        {
            System.out.println("ArrayIndexOutOfBoundsException occurs");
        }

        System.out.println("rest of the code");
    }
}
```

Output 12.a :

```
● student@csiot-ThinkCentre-M70s:~/CHETAN_I_007/00Ps/Exp12$ javac MultipleCatchBlock1.java
● student@csiot-ThinkCentre-M70s:~/CHETAN_I_007/00Ps/Exp12$ java MultipleCatchBlock1
Arithmetic Exception occurs
rest of the code
```

Code 12.b :

```
public class MultipleCatchBlock2 {  
    public static void main(String[] args) {  
        try{  
            int a[]=new int[5];  
            System.out.println(a[10]);  
        }  
        catch(ArithmeticException e)  
        {  
            System.out.println("Arithmetic Exception occurs");  
        }  
        catch(ArrayIndexOutOfBoundsException e)  
        {  
            System.out.println("ArrayIndexOutOfBoundsException occurs");  
        }  
        System.out.println("rest of the code");  
    }  
}
```

Output 12.b :

```
● student@csiot-ThinkCentre-M70s:~/CHETAN_I_007/00Ps/Exp12$ javac MultipleCatchBlock2.java  
● student@csiot-ThinkCentre-M70s:~/CHETAN_I_007/00Ps/Exp12$ java MultipleCatchBlock2  
ArrayIndexOutOfBoundsException occurs  
rest of the code
```

Conclusion :

With this experiments we learn how to implement exception in java programming language.