

## Practical No: 20

**AIM: - Write a java program for creating a single try block with multiple catch blocks.**



```
1 import java.util.*;
2 import java.lang.*;
3
4 public class Main {
5     public static void main(String[] args) {
6         Scanner sc = new Scanner(System.in);
7         try {
8             int n = sc.nextInt();
9
10            if (99 % n == 0) {
11                System.out.println(n+" is a factor of 99");
12            }
13        }
14        catch (ArithmeticException ex) {
15            System.out.println("Arithmetic : " + ex);
16        }
17        catch (NumberFormatException ex) {
18            System.out.println("Number : " + ex);
19        }
20    }
21 }
```

STDIN

99

Output:

99 is a factor of 99

## Practical No: 21

**AIM: - Write a program for multiple try blocks and multiple catch blocks including finally.**

```
1 import java.lang.*;
2 import java.util.*;
3
4 public class Main{
5     public static void main(String[] args){
6         int arr[] = new int[5];
7
8         try{
9             //nested try
10            try{
11                System.out.println("Divide : 1");
12                int b = 23 / 0;
13            }
14
15            catch(ArithmeticException e){
16                System.out.println(e);
17            }
18
19            try{
20                arr[7] = 10;
21                int c = 22/0;
22                System.out.println("Divide 2 : " +c);
23            }
24
25            catch(ArithmeticException e){
26                System.out.println("Error : Divide by 0");
27            }
28
29            catch(ArrayIndexOutOfBoundsException ex){
30                //ignored
31                System.out.println("Error : Array Out Of Bound!");
32            }
33        }
34
35        catch(Exception e){
36            System.out.println("Handled!");
37        }
38    }
39 }
```

AI NEW JAVA RUN

STDIN

Input for the program ( Optional )

Output:

Divide : 1  
java.lang.ArithmeticException: / by zero  
Error : Array Out Of Bound!

## Practical No: 22

**AIM: - Write a program to create user defined exceptions.**

Main.java + AI NEW JAVA RUN

1 //Lab No : 22  
2 import java.util.\*;  
3 import java.lang.\*;  
4  
5 class MyException extends Exception{  
6 public MyException(String s){  
7 //call constructor of parent Exception!  
8 super(s);  
9 }  
10 }  
11  
12  
13 public class Main {  
14 public static void main(String[] args) {  
15 try{  
16 //throw an object of user defined Exception  
17 throw new MyException("User-Algorithms!");  
18 }  
19  
20 catch (MyException ex){  
21 System.out.println("Found & Caught Sucessfully!");  
22 //print th message from MyException object  
23 System.out.println(ex.getMessage());  
24 }  
25 }  
26 }

STDIN

Input for the program ( Optional )

Output:

Found & Caught Sucessfully!  
User-Algorithms!