

Implement a program on Exception Handling

1)Try-catch

```
class Main2
{
    public static void main(String args[])
    {
        try{
            int divideByZero = 8/0;
            System.out.println("Rest of code in try block");
        }

        catch (ArithmeticException e) {
            System.out.println("ArithmeticException => " +
e.getMessage());
        }
    }
}
```

Output :

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19045.3448]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Chaitanya24\Desktop\00PJ Exp>javac trycatch.java
C:\Users\Chaitanya24\Desktop\00PJ Exp>java trycatch.java
ArithmeticException => / by zero
C:\Users\Chaitanya24\Desktop\00PJ Exp>
```

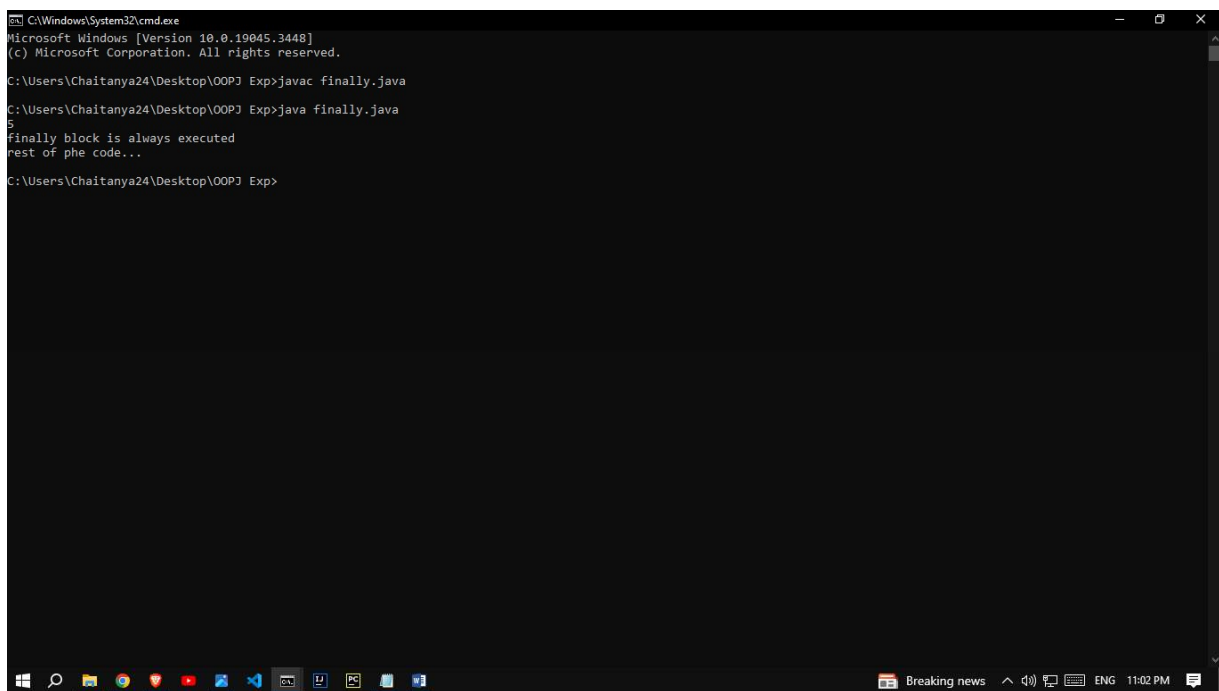
2)finally

```
class TestFinallyBlock {
    public static void main(String args[]){
        try{
            int data=25/5;
            System.out.println(data);
        }
        catch(NullPointerException e){
            System.out.println(e);
        }
    }
}
```

```
finally {  
System.out.println("finally block is always executed");  
}
```

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

Output:



```
C:\Windows\System32\cmd.exe  
Microsoft Windows [Version 10.0.19045.3448]  
(c) Microsoft Corporation. All rights reserved.  
  
C:\Users\Chaitanya24\Desktop\OOPJ Exp>javac finally.java  
C:\Users\Chaitanya24\Desktop\OOPJ Exp>java finally.java  
5  
finally block is always executed  
rest of the code...  
C:\Users\Chaitanya24\Desktop\OOPJ Exp>
```

3) throws

```
Import java.io.*;
class Testthrows2{
    public static void main(String args[]){
        try{
            M m=new M();
            m.method();
        }catch(Exception e){System.out.println("exception
handled");}

        System.out.println("normal flow...");
    }
}
class M{
    void method()throws IOException{
        throw new IOException("device error");
    }
}
```

Output:

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19045.3448]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Chaitanya24\Desktop\00PJ Exp>javac throws.java

C:\Users\Chaitanya24\Desktop\00PJ Exp>java throws.java
exception handled
normal flow...

C:\Users\Chaitanya24\Desktop\00PJ Exp>
```

4)throw

```
class TestThrow3
{
    public static void main(String args[])
    {
        try
        {
            throw new UserDefinedException("This is user-
defined exception");
        }
        catch (UserDefinedException ude)
```

```
        {
            System.out.println("Caught the exception");
            System.out.println(u.de.getMessage());
        }
    }
}
class UserDefinedException extends Exception
{
    public UserDefinedException(String str)
    {
        super(str);
    }
}
```

Output:

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19045.3448]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Chaitanya24\Desktop\00PJ Exp>javac throw.java

C:\Users\Chaitanya24\Desktop\00PJ Exp>java throw.java
Caught the exception
This is user-defined exception

C:\Users\Chaitanya24\Desktop\00PJ Exp>
```

