

## 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());
```

```
    }
```

```
}
```

```
}
```

```
Microsoft Windows [Version 10.0.22621.1992]  
(c) Microsoft Corporation. All rights reserved.  
  
C:\Users\Vedika\Desktop\S3-46>javac Main2.java  
  
C:\Users\Vedika\Desktop\S3-46>java Main2.java  
ArithmeticException => / by zero
```

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...");  
    }  
}
```

```
Microsoft Windows [Version 10.0.22621.1992]  
(c) Microsoft Corporation. All rights reserved.  
  
C:\Users\Vedika\Desktop\S3-46>javac TestFinallyBlock.java  
  
C:\Users\Vedika\Desktop\S3-46>java TestFinallyBlock.java  
5  
finally block is always executed  
rest of the code...
```

3)throws

```
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");
    }
}
```

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.22621.2283]
(c) Microsoft Corporation. All rights reserved.

C:\Users\student\Desktop\java1>javac throws.java

C:\Users\student\Desktop\java1>java throws.java
error: class found on application class path: Testthrows2

C:\Users\student\Desktop\java1>
```

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(ude.getMessage());
    }
}
}
class UserDefinedException extends Exception
{
    public UserDefinedException(String str)
    {
        super(str);
    }
}
```

```
Microsoft Windows [Version 10.0.22621.1992]
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C:\Users\Vedika\Desktop\S3-46>javac TestThrow3.java

C:\Users\Vedika\Desktop\S3-46>java TestThrow3.java
Caught the exception
This is user-defined exception
```