# Chapter 14 Exception Class in Java by Munawar

## Exception class in java

We can write are custom exceptions using function class in java.

Public class My Exceptions extends Exception {

// overridden methods

}

The Exception class has following important methods:

1. String to string () ---------- > executed where sout (e) is run

2. Void Print Stack Trace () ---------- > print stack trace

3. String get Message () ---------- > prints the exception message

## The throw keyword

The throw keyword is used to throw an exception explicitly by the programmer

If (a==0)

{

 Throw new Arithmetic Exception ("div by 0")

}

else {

return b/a;

}

In a similar manner, we can throw user defined exceptions:

Throw new My Exceptions ("Exception Thrown ");

## Source Code

```java
import java.security.PublicKey;
import java.util.Scanner;

class MyException extends Exception{
    @Override
    public String toString(){
        return  super.toString()+"I am to String()";
    }

    @Override
    public String getMessage() {
        return "I am get message() ";
    }
}

class AgeException extends Exception{
    @Override
    public String toString(){
        return "Age cannot be greater than 150 ";
    }

    @Override
    public String getMessage() {
        return "Make sure that the value of age entered is correct ";
    }
}
public class Errors_Java {
    public static void main(String[] args) {
        int a;
        Scanner sc=new Scanner(System.in);
        a=sc.nextInt();
        if(a<100){
            try {
//              throw new MyException();
                throw new ArithmeticException("This is new arithmetic
exception:");
            }catch (Exception e){
                System.out.println(e.getMessage());
                System.out.println(e.toString());
                System.out.println(e);
                e.printStackTrace();


            }
            System.out.println("Finished");
        }
```

```
        }
    }
}
```

Thank You