**Exception Handling (Try Catch)**

Basically Try Catch are blocks that can be handle under exception handling.

**Why Exception Handling is required?**

Exception means whenever we encounter with an error.  
Exception doesn’t let to execute the further code in the programme.

So to avoid this we come with Exception Handling where try catch come into play.

By doing try catch, we keep those statements in try{} block which might cause an error and catch the exact error from catch{} block whose type is *Exception*.   
We can also print our custom error message inside catch{} block.

By doing so, it also let to execute the further code.

**Note:**There is finally{} comes after try{} and catch{} block, that execute their code in both cases (try & catch).

**Example:**

public class Main {

public static void main(String[] args) {

int a = 10;

try {

System.out.println(a / 0);

} catch (Exception err) {

System.out.println(err);

System.out.println("We can't divide any number with 0");

}

System.out.println("HELLO THIS IS NEXT CODE");

}

}

**Output:**java.lang.ArithmeticException: / by zero

We can't divide any number with 0

HELLO THIS IS NEXT CODE

**Throw & Throws**

**Example: //Throw**public class Main {

public static void main(String[] args) {

int a = 10;

try {

System.out.println(10 / 2);

if (a == 10) {

System.out.println("Hello");

// Forcefully throwing an error calling it as "test" of ArithmeticException type

throw new ArithmeticException("test");

}

} catch (ArithmeticException err) { // ArithmeticException is a Typeof exception

System.out.println("Some Error: " + err);

}

}

}

**Output:**5

Hello

Some Error: java.lang.ArithmeticException: test

**Example: //Throws (use for exception handling in function)**public class Main {

public static void main(String[] args) {

int a = 10;

try {

checkAge();

} catch (ArithmeticException err) { // ArithmeticException is a Typeof exception

System.out.println("Some Error: " + err);

}

}

// functionAction throws typeOfException

public static void checkAge() throws ArithmeticException {

System.out.println(10 / 0);

}

}

**Output:**Some Error: java.lang.ArithmeticException: / by zero