Throwable class is the root class of Java Exception and Error

Exception:

Checked Exception:

* I/O Exception
* Sql Exception
* Class Not Found

UnChecked Exception:

* Arithmetic Exception
* Null Pointer Exception
* Number Format Exception
* Index Out of Bound Exception

- Array Index Out Bound Exception

- String Index Out Bound Exception

Error:

* Stack Overflow
* Virtual Memory
* Out Of Memory

Exception:

Exception is an abnormal condition

Exception handling:

Exception handling is to maintain the normal flow of the application

Exception handling Examples:

* Suppose there are 10 statements in your program,If exception occurs at 5th statement,

the rest of the code will not be executed i.e. statement

6 to 10 will not be executed.

If we perform exception handling, the rest of the statement will be executed.

That is why we use exception handling in Java.

Try:

We normally put exception code Within Try Block

Catch:

The "catch" block is used to handle the exception. It must be preceded by try block which means we can't use catch block alone.

Finally:

The "finally" block is used to execute the important code of the program. It is executed whether an exception is handled or not.

Throw:

The "throw" keyword is used to throw an exception.

Throws:

The "throws" keyword is used to declare exceptions. It doesn't throw an exception.

It is always used with method signature.

Exception Program Example:

public class JavaExceptionExample{

public static void main(String args[]){

try{

int data=100/0; }

catch(ArithmeticException e){System.out.println(e);}

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

}

Examples:

Arithmetic Exception

int a=50/0;

Null Pointer Exception

String s=null;

System.out.println(s.length());

Number Format Exception

String s="abc";

int i=Integer.parseInt(s);

Array Index Out Of Bounds Exception

int a[]=new int[5];

a[10]=50;