

① Exception Handling :-

The Exception Handling in Java is one of the powerful mechanism to handle the runtime errors so that the normal flow of the application can be maintained.

Such as class not found exception, IOException, SQLException, RemoteException etc.

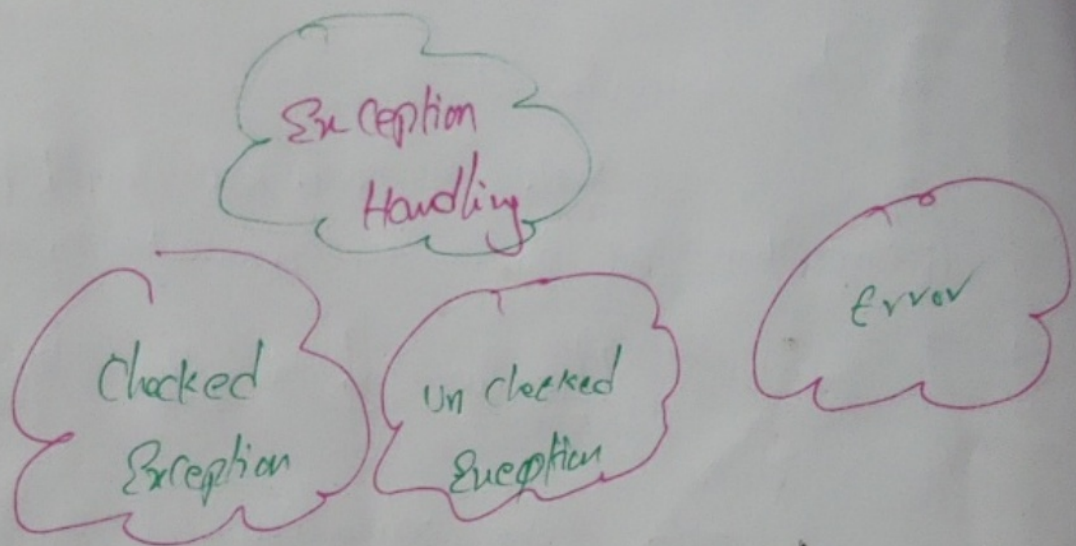
Advantage of Exception Handling

The core advantage of exception handling is to maintain the normal flow of the application. An exception normally disrupts the normal flow of the application.

The java.lang.Throwable class is the root class.

Types of Java Exception :-

- ① checked Exception
- ② unchecked Exception
- ③ Error



Checked Exception :-

The class that directly inherits from the Throwable class except Runtime and Error are known.

For Example :- IOException, SQLException

```
int result = dividend / divisor;  
System.out.println("Result: " + result);  
}
```

```
Catch (ArithmeticException e) {  
}
```

```
Catch (ArithmeticException e) {
```

```
System.out.println("An Arithmetic Exception occurred")
```

```
}
```

```
}
```

```
}
```

Example on using finally:-

```
import java.io.BufferedReader;
```

```
import java.io.FileReader;
```

```
import java.io.IOException;
```

```
public static void main (String[] args) {
```

```
try {
```

```
    reader = new BufferedReader (new FileReader (args[0]));
```

```
    if (reader != null) {
```

```
        }
```

```
    }
```

```
}
```


Error:

Error is irrecoverable

Some Example of Error are out of memory Error,
Virtual Machine Error, Assertion Error etc

Java Exception keyword:

Java Exception keyword are 5 types

- * try
- * catch
- * finally
- * throw
- * throws

Example on using Handling Algorithm Exception

Public class Example 1

Public static void main (String[] args)

{

int dividend = 10;

int divisor = 0;

try {