Packages:

It is like having group of individual classes,interfaces having similar kind of functionality.

It is divided into 2types

1. Inbuilt packages 🡺 lang, util, io
2. User defined packages 🡺 our own packages

By using packages we can protect the data

Access modifiers:

These access modifiers can be used on methods and variables and classes

1. Public 🡺 it is accessible in entire project, that is within and outside the packages.
2. Private 🡺 it is accessible within that same class, you cant access outside the class in the packages.
3. Protected 🡺 it is accessible outside the packages but using inheritance and inside the package you access normally.
4. Default 🡺 it is accessible within the package and cant access from outside the package.

Exceptions:

To handle runtime errors so that normal flow of the code will take place.

It is divided into 3 parts.

1. Checked exception: all compile time exceptions are checked exception.

Ex: IOException, SQLException 🡺 Exeception

1. Unchecked exception : all runtime exceptions are called unchecked exception.

Ex: ArrayOutOfBoundException, ArithmeticException, NullPointerException etc.

1. Error: it is irrecoverable and cant handle it. Ex: stackOverFlow error, assertionError.

Try:

It is a keyword and where ever the exception may a occur in the code, that code you need to place inside try block.

try{

………………….

………………..

}catch(NullPointerException ex){

Sysout(ex.getMessage())

}finally{

………..

}

Catch: it is used to catch the exception

Finally: if exception may occur or not but whatever the code inside finally block if your using then that code will get executed.

Throw: it is used to throw the exception

Throws: for declaring whatever the exception throw is using

Custom exception can be thrown by using throw and throws keyword.

* Runtime Custom exception
* Compile time custom exception