**JFSD: A-Z of Back-end and Database Development**

**Day 4 : 20 Jul. 24**

**Pre defined packages**

Core Java provided mainly two root packages

Ie java javax -🡪 root package

lang sql

io net

util servlet

sql ejb

net

etc etc

By Every java program imported lang package. So we can use all classes and interfaces part of lang package without import.

By default in Java every user defined or pre defined directly or indirectly extends pre defined class Object. Object is super class for all classes by default.

Super API (Application Programming Interface) it can be class or interface.

lang packages classes and interfaces

Exception and type of exception classes : Exception handling

Thread class and Runnable interface : Multi threading

String

StringBuffer

StringBuilder

Class pre defined class. class keyword.

Object

Wrapper (Integer, Float, Character, all 8 classes).

System

Exception Handling : Exception is an object or memory when unexcepted or abnormal conditions occurs during the execution of a program is known as exception. To handle generated exception using some technique is known as exception handling.

Java Program

javac (Java Compiler) java (Java Interpreter)

convert whole code in another format. It check the code line by line.

.class file (byte code)

javac Demo.java java Demo

Compile time error Run time error

Syntax error or typo error Error Exception

Error : it is a type of pre defined class part of lang package. Error is a type of error which generate at the run time which we can’t handle it. JVM crash, software or hardware issue, out of memory etc.

Exception : it is type of pre defined class part of lang package. Exception is a type of error which generate at run time which we can handle it. Divided by Zero.