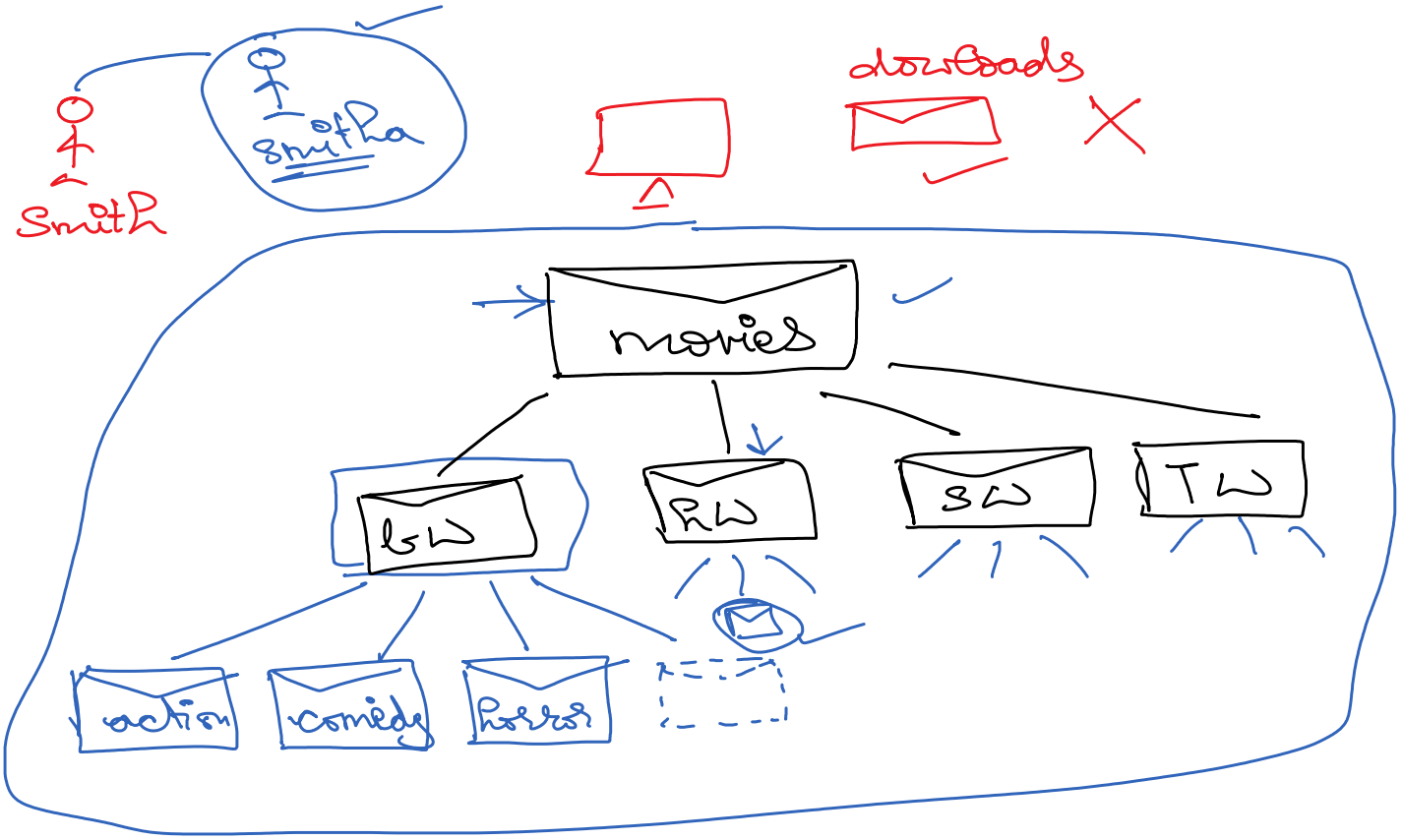
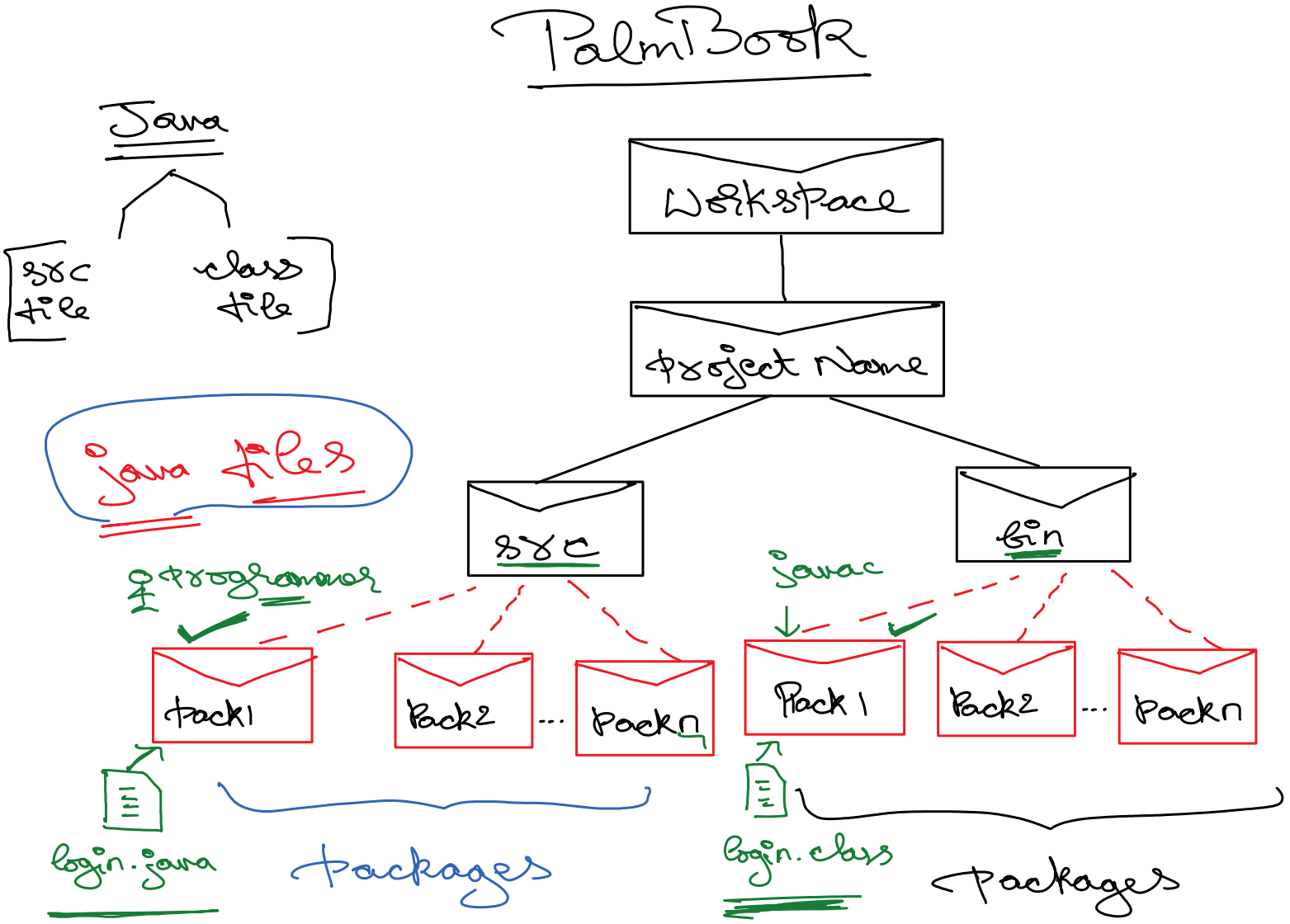
Pg1

Monday, June 22, 2020 1:15 PM





Package :

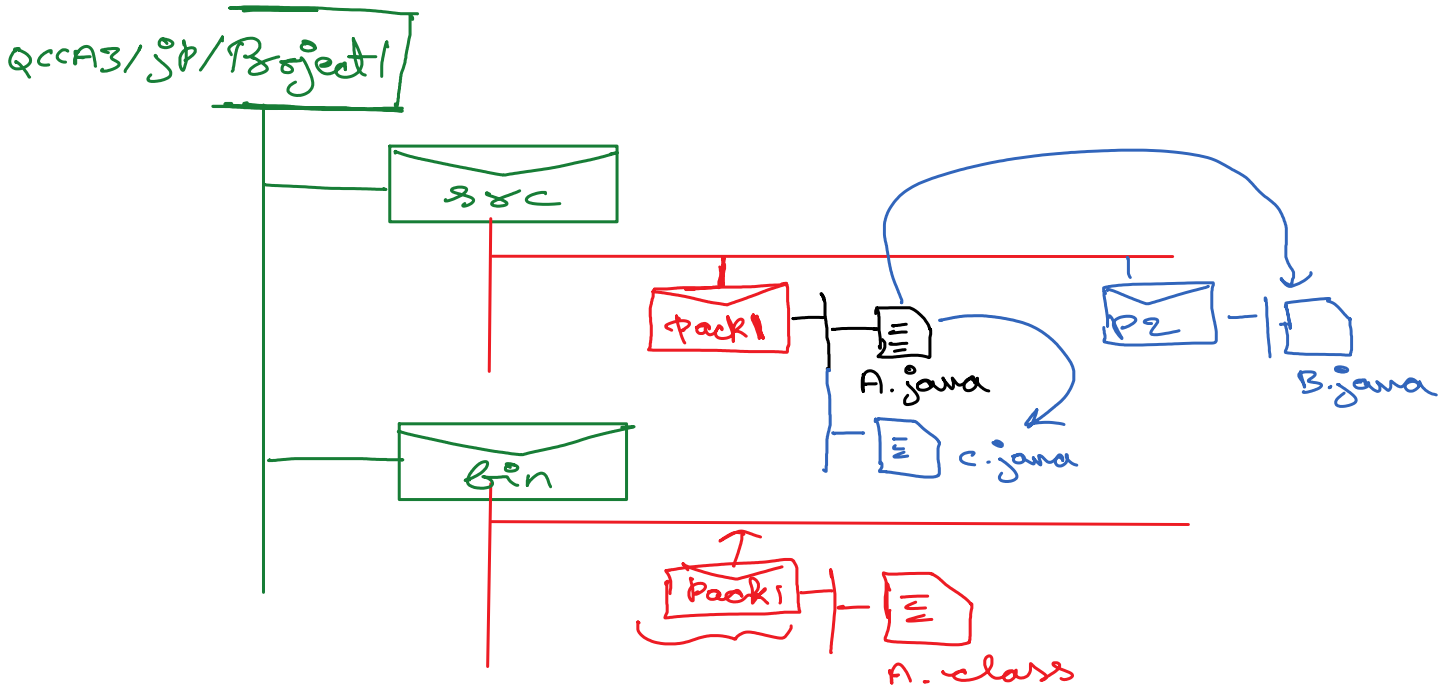
A folder which is used to organize the java files is known as a package.
(The packages are created by the programmers inside the src(Source) folder)

Advantage :

1. The source files of the application will be organized.
2. It becomes easy to access the files.
3. To avoid naming conflicts. (a project having multiple files with same name is possible)

To create and store java files in Packages using Command Prompt :

Step1 : select workspace
Step2 : create a folder for project
Step3 : create src and bin folders inside project folder.
Step4 : inside src create a package folder.
Step5 : compile the java file and generate the class file



Command to Compile From Command Prompt :

```
javac  -d  path_of_bin   package/filename.java
```

Command to Execute class file from Command Prompt :

```
java   -cp   path_of_bin   package . Classname
```

Fully Qualified Name :

A java member name along with its' package is known as fully qualified name.

package :

it is a keyword in java, which helps to create packages.

Syntax :

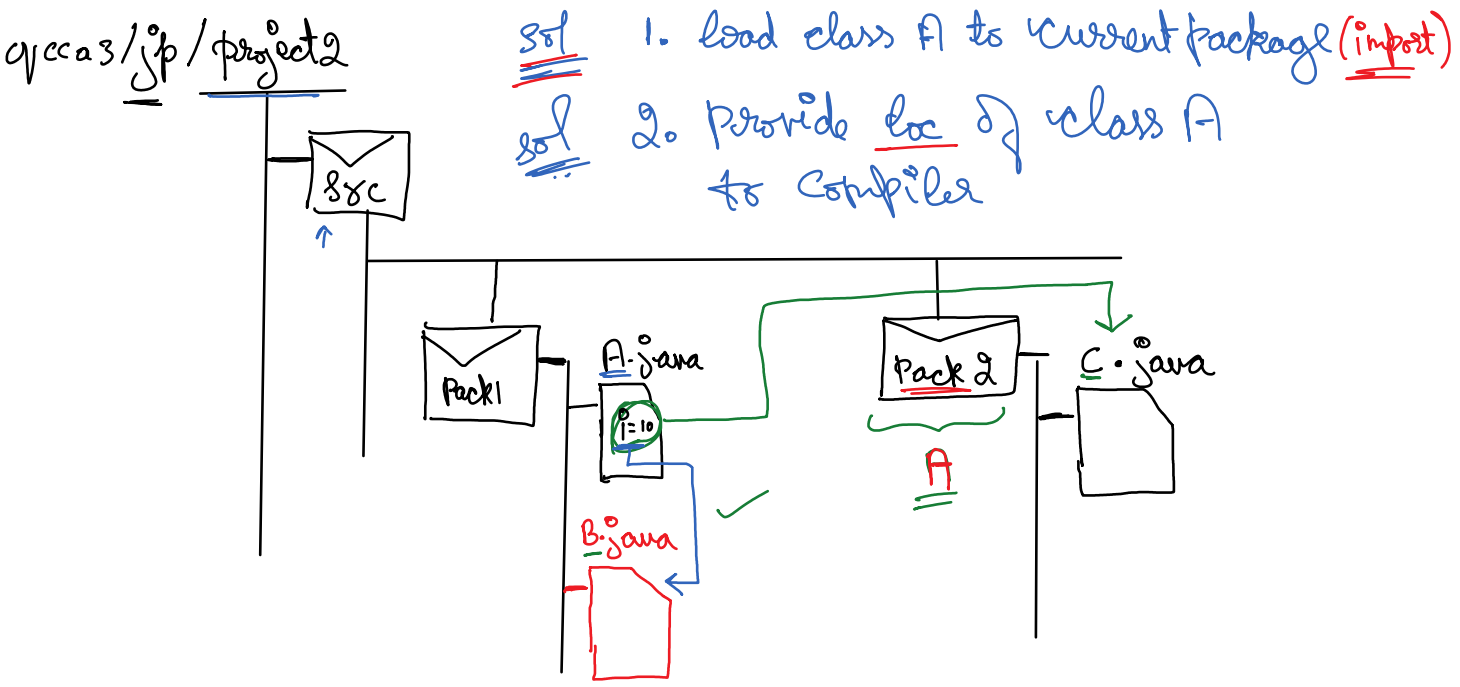
```
package   package_name ;
```

Rule :

1. the instruction should always be written outside a class, on top of the java file.

To use members of a class Outside a package :

Scenario 1 :



Case1 : use member of class A in class B (A & B present in same package)

Case2: use member of class A in class C (A & C present in diff package)

Note :

1. We can only use a **public** member outside a package, a **non-public** member cannot be used outside a package.

How to use a public member outside the package ?

Ans.

We can use a public member outside a package in 2 ways :

1. with the help of fully qualified name.
2. with the help of import.

import :

1. it is a keyword in java.

Purpose :

To load a public class present in different package into current package.

Syntax:

```
import  package_name . class_name  ;

import package_name  . *  ;
```

Assignment 1

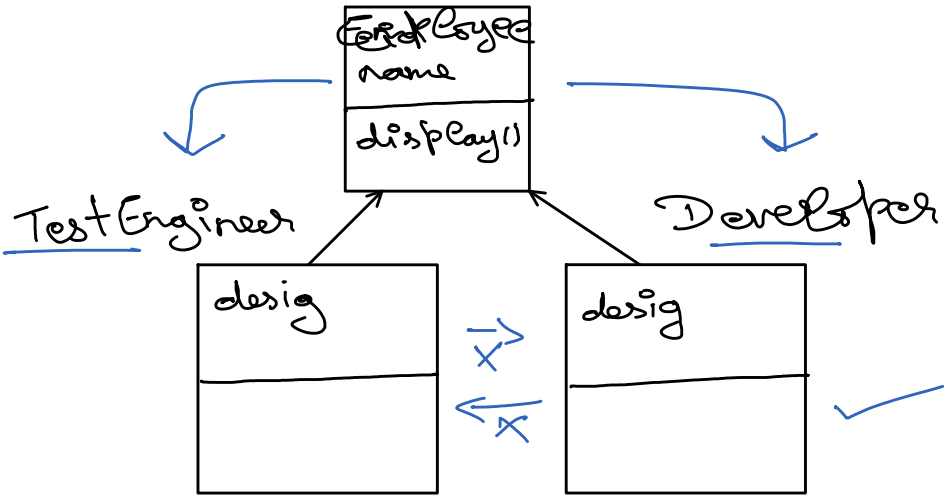
Saturday, April 4, 2020 9:26 AM

→ create Employee_management project.

→ There should be 3 (three) packages

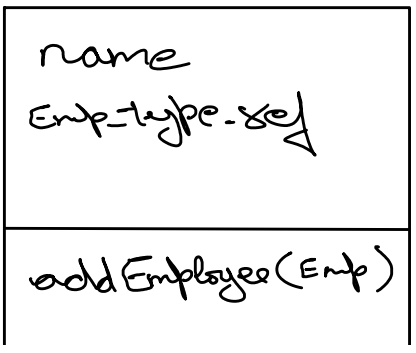
1. emp
2. comp
3. driver

→ Inside emp package create following:



→ Inside comp package, create the following

Company



addEmployee(Emp)

-> Inside driver package, create a driver class to test the above designs.

1.) create object of company.

2.) create object of desired employee and add him to the company

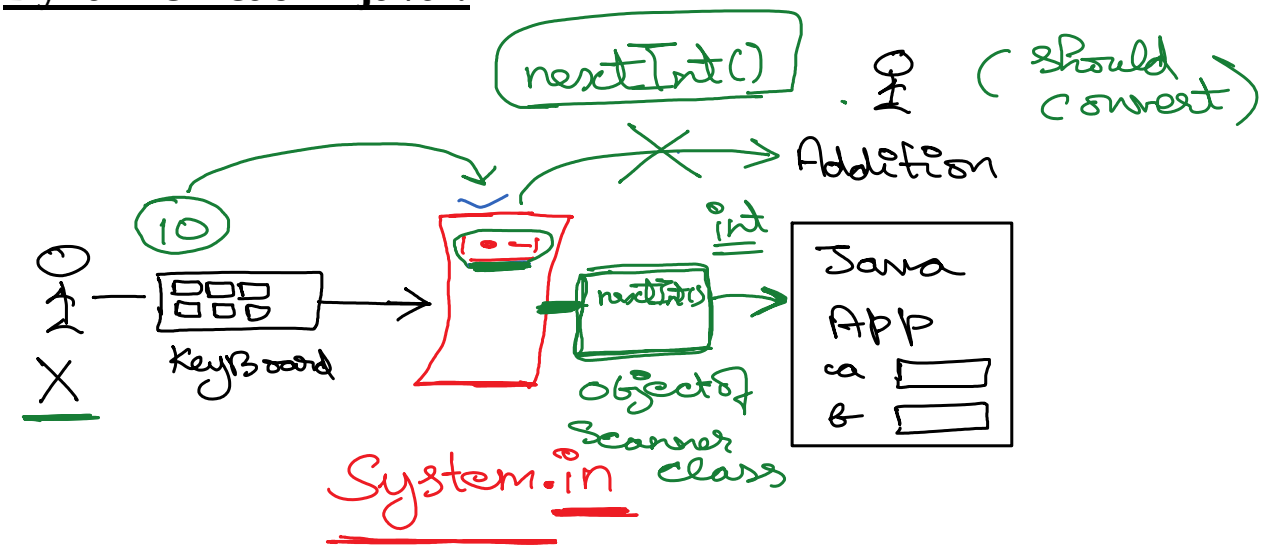
3.) display details of the employee present in the company.

Wednesday, June 24, 2020 1:08 PM

To pass input data to the program :

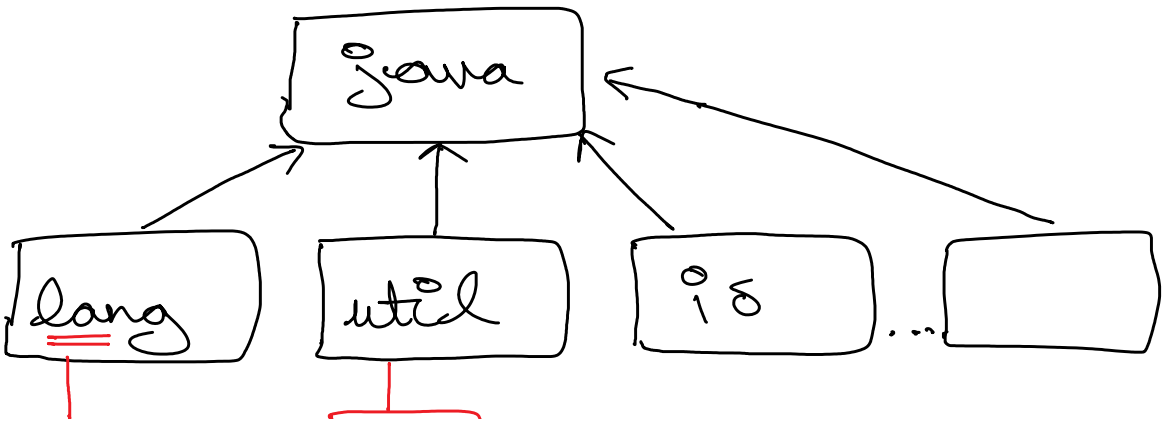
1. programmer gives the input (Direct values / literals)
2. read data from user during execution of the program (dynamic read)
3. pass the data to the program when it is called for execution (command line argument)

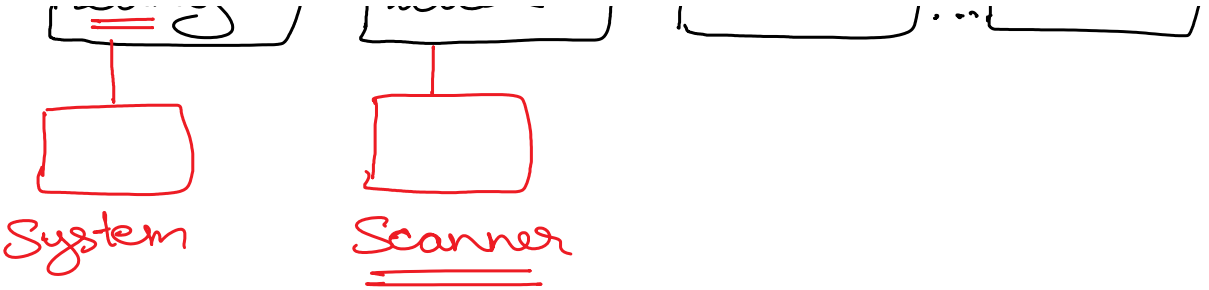
Dynamic Read in java :



Built-In, class called as Scanner class is used for Dynamic read.

In java, we have built-in packages





Note :

1. all the public classes present in java.lang package is imported by default.

Steps To use Scanner class :

Step1 :

import Scanner class from java.util package

Step2 :

Create an Object of Scanner class and initialize it with System.in

Step3 :

Use the methods of Scanner class to read the data from the user.

Non-static Methods Of Scanner Class to read Data

int nextInt()	it is used to read int value
byte nextByte()	it is used to read byte
short nextShort()	it is used to read short
long nextLong()	it is used to read long
float nextFloat()	it is used to read float
double nextDouble()	it is used to read double
String next()	it is used to read a string(one word/ up to space)
String nextLine()	it is used to read a string up to new line.

Assignment 1

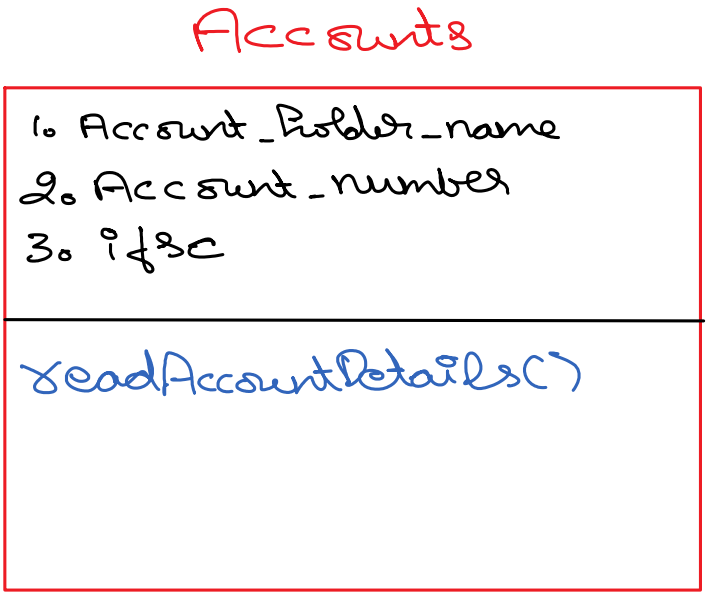
Wednesday, June 24, 2020 2:10 PM

Note : Do all the programs by reading the data dynamically

1. Write a program to print even numbers between m and n (m and n should be read from the user)
2. Write a program to check whether a number is even number or odd number (read that number from user)
3. Write a program to obtain factorial of n (read n from the user)
4. Write a program to reverse a number (read the number from the user)

Assignment2

Wednesday, June 24, 2020 2:11 PM



Task 1 :

1. Design a java class for the above class Diagram.
2. Achieve data hiding. (encapsulate all the attributes)
3. design suitable constructors, so that it becomes easy for Serveice user to create the Account object.
4. design readAccountDetails() method, such that if called, it reads data dynamically from the user and initializes the attributes of the Account class.

Task 2 :

1. create a Driver class, to test the Account class.