DAY 2

/\*

//Static Variable

import java.util.Scanner;

class Student {

String name;

int regno;

static int sem;

void input() {

Scanner sc = new Scanner(System.in);

System.out.print("Enter name, reg no & semester in order: ");

name = sc.nextLine();

regno = sc.nextInt();

sem = sc.nextInt();

}

void show() {

System.out.println("Details:");

System.out.println("Name:" + name);

System.out.println("Reg. No:" + regno);

System.out.println("Semester:" + sem);

}

}

class Database {

public static void main(String[] args) {

Student s1 = new Student();

Student s2 = new Student();

s1.input();

s2.input();

s1.show();

s2.show();

}

}

\*/

/\*

Packages in Java: It is just like a folder. It may consists of sub-packages and class files & interfaces.

1) Built-in packages: lang, util, io, sql, net, awt, javax etc

lang - the default package

2) User defined packages

\*/

/\*

import java.util.Scanner;

class Test {

public static void main(String[] args) {

String s;

int roll;

Scanner sc = new Scanner(System.in);

System.out.print("Enter roll no: ");

roll = sc.nextInt();

sc.nextLine();

System.out.print("Enter name: ");

s = sc.nextLine();

System.out.println("Name: " + s);

System.out.println("Roll no: " + roll);

}

}

\*/

/\*

// Command Line Argument

// Take two values from command line arg and print their sum

class Test {

public static void main(String[] args) {

System.out.println("Sum: " + (Integer.parseInt(args[0]) + Integer.parseInt(args[1])));

}

}

\*/

/\*

Note: members of same class can access other members even if it is private.

Access Modifiers: private, public, protected, default (no access modifier)

Within Different Class Different Class

class within package outside package

private Yes No No

default Yes Yes No

protected Yes Yes Yes(But only child class object can access)

public Yes Yes Yes

\*/

/\*

class Demo {

private int a;

public static void main(String[] args) {

Demo ob = new Demo();

ob.a = 20;

System.out.println("Data: " + ob.a);

}

}

\*/

/\*

// Setters & Getters

class Demo {

private int a;

//protected int b;

//public int c;

//default

//int d;

//setter

void setA(int val) {

a = val;

}

//getter

int getA() {

return a;

}

}

class DemoDriver {

public static void main(String[] args) {

Demo ob = new Demo();

ob.setA(20);

System.out.println("Data: " + ob.getA());

}

}

\*/

/\*

//Accessing Public member

class Demo {

//protected int b;

public int c;

//default

//int d;

}

class DemoDriver {

public static void main(String[] args) {

Demo ob = new Demo();

ob.c = 20;

System.out.println("Data: " + ob.c);

}

}

\*/

//Accessing Protected member - refer Demo.java & package.java files

/\*

Static & Non-static methods

From/To Non-Static member Static member

Non-Static method object object

directly\* Class name

Static method object object

Class name

directly\*

\*: Within the same class

\*/

class Test {

static int x;

int y;

/\*

void show() {

System.out.println("Data: X = " + x + " Y = " + y);

}

\*/

static void display(Test ob) {

// System.out.println("Data: X = " + x);

// System.out.println("Data: X = " + Test.x);

System.out.println("Data: X = " + ob.x + " Y = " + ob.y);

}

}

class TestDrive {

public static void main(String[] args) {

Test ob = new Test();

ob.x = 20;

ob.y = 30;

// ob.show();

// ob.display();

Test.display(ob);

}

}

/\*

class Test{

// Constructor

Test() {

}

}

Test ob = new Test(); //Creates object

It will implicitly invoke Test constructor and constructor will create object.

\*/

package one;

public class Demo {

protected int c;

}

class Driver {

public static void main(String[] args) {

Demo ob = new Demo();

ob.c = 35;

System.out.println("Data: " + ob.c);

}

}

package two;

import one.Demo;

/\*

class DemoDriver {

public static void main(String[] args) {

one.Demo ob = new one.Demo();

ob.c = 20;

System.out.println("Data: " + ob.c);

}

}

\*/

class DemoDriver extends one.Demo{

public static void main(String[] args) {

DemoDriver ob = new DemoDriver();

ob.c = 20;

System.out.println("Data: " + ob.c);

}

}