**package** com.controller.org;

**public** **class** Allergy {

//declaring variables as private

**private** String allergyname;

**private** String severity;

// generate getters and setters

**public** **void** setAllergyname(String allergyname) {

**this**.allergyname = allergyname;

}

**public** String getAllergyname()

{

**return** allergyname;

}

**public** **void** setSeverity(String severity) {

**this**.severity = severity;

}

**public** String getSeverity() {

**return** severity;

}

}

//method overloading

//here we are using "Numbers" class

package com.controller.org;

public class NumbersClient {

public static void main(String[] args) throws Exception {

System.out.println("2. Create a class, method with void, with parameters and void, return type and parameter");

// calling call() method

call();

// calling call1() method with return type int

int i2= call1();

System.out.println(i2);

//calling call2() method with return type string

String i3=call2();

System.out.println(i3);

System.out.println("------------------------");

// using "Numbers" class and creating its object

Numbers num = new Numbers();

// setting the values for the variables that are declared in "Numbers" class

num.setA(11);

num.setB(6);

num.setC(7.3);

num.setD(9.4);

System.out.println("5. Perform method overloading");

//calling minFunction(int n1, int n2)

int result1 = minFunction(num.getA(),num.getB());

//calling minFunction(double n1, double n2)

double result2 = minFunction(num.getC(), num.getD());

System.out.println("Minimum Value = " + result1);

System.out.println("Minimum Value = " + result2);

}

public static int minFunction(int n1, int n2) {

int min;

if (n1 > n2)

min = n2;

else

min = n1;

return min;

}

private static double minFunction(double n1, double n2) {

// TODO Auto-generated method stub

double min;

if (n1 > n2)

min = n2;

else

min = n1;

return min;

}

public static void call() throws Exception {

System.out.println("---------------------------");

System.out.println("returning null here");

return;

}

public static int call1() throws Exception {

System.out.println("returning variable here");

return 2;

}

public static String call2() throws Exception {

System.out.println("returning string here");

return "satish";

}

}

//this is method overloading

**package** com.controller.org;

**public** **class** Numbers {

//declaring variables as private

**private** **int** a ;

**private** **int** b;

**private** **double** c;

**private** **double** d;

//default constructor

**public** Numbers() {

System.***out***.println("this default cons is invoked when an object is created");

}

//generate getters and setters

**public** **int** getA() {

**return** a;

}

**public** **void** setA(**int** a) {

**this**.a = a;

}

**public** **int** getB() {

**return** b;

}

**public** **void** setB(**int** b) {

**this**.b = b;

}

**public** **double** getC() {

**return** c;

}

**public** **void** setC(**double** c) {

**this**.c = c;

}

**public** **double** getD() {

**return** d;

}

**public** **void** setD(**double** d) {

**this**.d = d;

}

}

//this is constructor overloading

**package** com.controller.org;

**public** **class** Patient {

// declaring variables as private

**private** String pname;

**private** **int** page;

**private** String pemail;

**private** **int** fevercentigrade;

// default constructor

**public** Patient() {

System.***out***.println("patient class is invoked");

pname="kishore";

page=25;

pemail="kishore@gmail.com";

fevercentigrade=98;

}

// parameterized constructor

**public** Patient(String pname, **int** page, String pemail, **int** fevercentigrade) {

**super**();

**this**.pname = pname;

**this**.page = page;

**this**.pemail = pemail;

**this**.fevercentigrade = fevercentigrade;

}

// generating getters and setters

**public** String getPname() {

**return** pname;

}

**public** **void** setPname(String pname) {

**this**.pname = pname;

}

**public** **int** getPage() {

**return** page;

}

**public** **void** setPage(**int** page) {

**this**.page = page;

}

**public** String getPemail() {

**return** pemail;

}

**public** **void** setPemail(String pemail) {

**this**.pemail = pemail;

}

**public** **int** getFevercentigrade() {

**return** fevercentigrade;

}

**public** **void** setFevercentigrade(**int** fevercentigrade) {

**this**.fevercentigrade = fevercentigrade;

}

}

//

**package** com.controller.org;

**public** **class** PatientClient {

**public** **static** **void** main(String[] args) **throws** Exception {

// **TODO** Auto-generated method stub

// calling "NumbersClient" main method

System.***out***.println("calling NumbersClient main from patient main");

NumbersClient.*main*(args);

System.***out***.println("7.Create private variables and using get and set methods "

+ "4.Purpose of main method, write a code for creating a object");

//// using "Allergy" class and creating its object

Allergy ag = **new** Allergy();

//setting Allergy name as "rashes" and severity as "high"

ag.setAllergyname("rashes");

ag.setSeverity("high");

// printing the details

System.***out***.println("Allergyname:"+ag.getAllergyname());

System.***out***.println("AllergySeverity:"+ag.getSeverity());

System.***out***.println("-------------------------------");

// performing constructor overloading

System.***out***.println("3.Create a constructor and constructor overloading");

// using "Patient" class and creating its object with "pat" as name

Patient pat = **new** Patient();

//printing the patient details using getters

System.***out***.println("patientName:"+pat.getPname());

System.***out***.println("patientAge:"+pat.getPage());

System.***out***.println("patientEmail:"+pat.getPemail());

System.***out***.println("patientTemp:"+pat.getFevercentigrade());

System.***out***.println("----------------------------");

// using "Patient" class and creating its object with "pat1" as name

Patient pat1 = **new** Patient("satish", 32, "satishh@gmail.com", 101);

//printing the patient details using getters

System.***out***.println("patientName:"+pat1.getPname());

System.***out***.println("patientAge:"+pat1.getPage());

System.***out***.println("patientEmail:"+pat1.getPemail());

System.***out***.println("patientTemp:"+pat1.getFevercentigrade());

System.***out***.println("----------------------------");

}

}