

Name:

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MC:

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OOP Assignment

**Q1**

**Main**

import java.util.Scanner;

public class Assignment\_Q1 {

/\*\*

\* @param args the command line arguments

\*/

public static void main(String[] args) {

// TODO code application logic here

Scanner input = new Scanner(System.in);

String Name;

float Cal, Gra, Calories;

System.out.println("Enter the food's name:");

Name = input.next();

System.out.println("Enter The Number Of Calories Per Serving: ");

Cal = input.nextInt();

System.out.println("Enter the amount of grams per serving:");

Gra = input.nextInt();

Calories = ((Gra\*9/Cal));

if (Calories<=0.3){

float P\_O\_cal;

P\_O\_cal=(Calories\*100)/100;

System.out.printf("The percentage of calories from food is:%.2f", P\_O\_cal);

System.out.println(); //skips line

System.out.println("Congratulations, the food meets the American Heart Association recommendation");

}

else {

float P\_O\_cal;

P\_O\_cal = (Calories\*100)/100;

System.out.printf("Thee percentage of calories from food is:%.2f", P\_O\_cal);

System.out.println(); //skips line

System.out.println("unfortunately, The food does not meet the American Heart Association recommendation");

}

}

}

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**The class file**

class Keyboard {

static String readString() {

throw new UnsupportedOperationException("Not supported yet."); //To change body of generated methods, choose Tools | Templates.

}

static double readFloat() {

throw new UnsupportedOperationException("Not supported yet."); //To change body of generated methods, choose Tools | Templates.

}

static int readInt() {

throw new UnsupportedOperationException("Not supported yet."); //To change body of generated methods, choose Tools | Templates.

}

}

**Q2**

package Assignment\_Q2;

import java.util.Scanner;

/\*\*

\*

\* @author Nafi

\*/

public class Assignment\_Q2 {

/\*\*

\* @param args the command line arguments

\*/

public static void main(String[] args) {

Scanner input = new Scanner (System.in);

int num, Sal;

double NSal = 0,subtract,allowance;

char Housing;

System.out.println("Please enter the number of employees:");

num=input.nextInt();

for (int i=0;i<num;i++){

System.out.println("Please enter your Salary:");

Sal=input.nextInt();

System.out.println("Have you applied the allowance for this month? Enter Y for YES and N for NO");

Housing=input.next().charAt(0);

if (Sal>=1 && Sal<=3000 && Housing=='Y'){

subtract= 0.91\*(Sal\*0.95);

allowance= Sal\*0.03;

NSal= allowance + subtract;

}

else if (Sal>=3001 && Sal<=5000 && Housing=='Y'){

subtract= (Sal\*0.91)\*0.93;

allowance=Sal\*0.03;

NSal=allowance+subtract;

}

else if (Sal>=5001 && Sal<=7000 && Housing=='Y'){

subtract=(Sal\*0.89)\*0.93;

allowance=Sal\*0.05;

NSal = allowance+subtract;

}

else if (Sal>=7001 && Sal<=9000 && Housing=='Y'){

subtract=(Sal\*0.87)\*0.87;

allowance=Sal\*0.05;

NSal=allowance+subtract;

}

else if (Sal>=9001 && Sal<= 12000 && Housing=='Y'){

subtract=(Sal\*0.85)\*0.87;

allowance=Sal\*0.05;

NSal=allowance+subtract;

}

else if (Sal>12000 && Housing=='Y'){

subtract=(Sal\*0.8)\*0.89;

allowance=Sal\*0.07;

NSal=allowance+subtract;

}

else if (Sal>=1 && Sal<=3000 && Housing=='N'){

subtract= (Sal\*0.95)\*0.91;

NSal=subtract; }

else if (Sal>=3001 && Sal<=5000 && Housing=='N'){

subtract= (Sal\*0.91)\*0.93;

NSal=subtract;}

else if (Sal>=5001 && Sal<=7000 && Housing=='N'){

subtract=(Sal\*0.89)\*0.93;

NSal=subtract;}

else if (Sal>=7001 && Sal<=9000 && Housing=='N'){

subtract=(Sal\*0.87)\*0.87;

NSal=subtract;

}

else if (Sal>=9001 && Sal<= 12000 && Housing=='N'){

subtract=(Sal\*0.85)\*0.87;

NSal=subtract;}

else if (Sal>12000 && Housing=='N'){

subtract=(Sal\*0.8)\*0.89;

NSal=subtract;

}

System.out.println("The Net Salary is:" +NSal);

}

}

}

**Q3**

package Assignment\_Q3;

import java.util.Scanner;

public class Assignment\_Q3 {

/\*\*

\* @param args the command line arguments

\*/

public static void main(String[] args) {

int num,k,Sum\_Occ=0,Sum\_Un\_Occ=0,Sum=0;

float Rooms\_Occ=0;

Scanner input = new Scanner (System.in);

System.out.println("Enter the number of floors:");

num=input.nextInt();

int Floors[]=new int[num];

int Occ[]= new int [num];

int Un\_Occ[]= new int [num];

if (num>=1){

for ( k=0;k<Floors.length;k++){

System.out.println("the number of occupied rooms in floor?");

Occ[k]=input.nextInt();

Sum\_Occ=Sum\_Occ+Occ[k];

System.out.println("the number of unoccupied rooms?");

Un\_Occ[k]=input.nextInt();

Sum\_Un\_Occ=Sum\_Un\_Occ+Un\_Occ[k];

Sum=Sum\_Un\_Occ+Sum+Sum\_Occ;

Rooms\_Occ= (Sum\_Occ/Sum)\*100;

}

System.out.printf("%-13s | %-15s | %-12s | %-12s | %-12s","Floor No.","No.Of Rooms","Occupied rooms"," Unoccupied Rooms","Percentage of Occupied Rooms\n");

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

System.out.printf("%-20d %-20d %-20d %-18d %-25.2f",num,Sum,Sum\_Occ,Sum\_Un\_Occ,Rooms\_Occ);

}

else {

System.out.println("Error! Invalid number of floors.");

}

}

}

**Q4**

**Main**

package Assignment\_Q4;

public class Assignment\_Q4 {

public static void main(String[] args) {

Employee std1= new Employee();

Employee std2= new Employee("Abdelrahman","belal",01);

Employee std3 = new Employee (std2);

System.out.println(std1.get\_f\_name());

**}**

**}**

**---------------------------------------------------------------------------------------------------------**

**Employee class**

**/\***

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\* and open the template in the editor.

\*/

package Assignment\_Q4;

/\*\*

\*

\* @author Nafi

\*/

public class Employee {

private String Fname,Lname;

private int Id\_no;

Employee(){

Fname="Abdelrahman";

Lname="Belal";

Id\_no=1;

}

Employee (String F, String L, int K){

Fname=F;

Lname=L;

Id\_no=K;

}

Employee (Employee obj){

Fname=obj.Fname;

Lname=obj.Lname;

Id\_no=obj.Id\_no;

}

void set\_f\_name(String f){

Fname=f;

}

String get\_f\_name(){

return Fname;

}

void set\_l\_name(String l){

Lname=l;

}

String get\_Lname(){

return Lname;

}

void set\_Id\_no(int K){

Id\_no=K;

}

int get\_Id\_no(){

return Id\_no;

}

}

**-----------------------------------------------------------------------------------------------------------------------**

**Home address class**

**/\***

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\* and open the template in the editor.

\*/

package Assignment\_Q4;

/\*\*

\*

\* @author Nafi

\*/

public class Home\_address extends Employee {

private String Street,Area,State,Home\_phone;

private int Zip\_Code;

Home\_address(){

super ();

Street="bandar sunway";

Area="Petaling Jaya";

State="selangor";

Zip\_Code=47500;

Home\_phone="01117695134";

}

Home\_address(String st, String ar, String state, int z, String hn, String f, String l, int i){

super(f,l,i);

Street=st;

Area=ar;

State=state;

Zip\_Code=z;

Home\_phone=hn;

}

Home\_address(Home\_address obj){

super(obj);

Street=obj.Street;

Area=obj.Area;

State=obj.State;

Zip\_Code=obj.Zip\_Code;

Home\_phone=obj.Home\_phone;

}

void set\_Street(String st){

Street=st;

}

String get\_Street(){

return Street;

}

void set\_Area(String ar){

Area=ar;

}

String get\_Area(){

return Area;

}

void set\_State(String state){

State=state;

}

String get\_State(){

return State;

}

void set\_Zip\_Code(int z){

Zip\_Code=z;

}

int get\_Zip\_Code(){

return Zip\_Code;

}

void set\_Home\_phone(String hn){

Home\_phone=hn;

}

String get\_Home\_phone(){

return Home\_phone;

}

}

**--------------------------------------------------------------------------------------------------------------------**

**Place of work class**

package Assignment\_Q4;

public class place\_of\_work extends Home\_address {

private String Designation,Depart,email,ph\_no;

private int lvl;

place\_of\_work(){

super();

Designation="";

Depart="";

email="abdoo.sa21@gmail.com";

lvl=1;

ph\_no="01117695134";

}

place\_of\_work(String d,String dept,String e,String p,int lv, String st, String ar, String state,int z, String h,String f, String l, int i){

super(st,ar,state,z,h,f,l,i);

Designation=d;

Depart=dept;

email=e;

ph\_no=p;

lvl=lv;

}

place\_of\_work(place\_of\_work obj){

super(obj);

Designation=obj.Designation;

Depart=obj.Depart;

email=obj.email;

ph\_no=obj.ph\_no;

lvl=obj.lvl;

}

void set\_Designation(String d){

Designation=d;

}

String get\_Designation(){

return Designation;

}

void set\_Depart(String dept){

Depart=dept;

}

String get\_Depart(){

return Depart;

}

void set\_email(String e){

email=e;

}

String get\_email(){

return email;

}

void set\_lvl(int lv){

lvl=lv;

}

int get\_lvl(){

return lvl;

}

void set\_ph\_no(String p){

ph\_no=p;

}

String get\_ph\_no(){

return ph\_no;

}

}