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\* PROGRAMMING LANGUAGE 2

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\* SEMESTER-SPRING

\* HOME WORK 6

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public class Person{

String name;

int age;

String ssn;

boolean alive;

//constructor

public Person(){

}

public Person(String n,int a,String s,boolean al){

if (! isValidstate(n,a,al)){

System.out.print("fatal error");

System.exit(0);

}

this.setaccessname(n);

this.setaccessage(a);

this.setaccessssn(s);

}

Person(String n,int a,boolean al){

if (! isValidstate(n,a,al)){

System.out.print("fatal error");

System.exit(0);

}

this.setaccessname(n);

this.setaccessage(a);

}

//variance checking

public boolean isValidstate(String name,int age,boolean alive){

return name!=null && !name.equals(" ")&&

(age!=0)&&

(alive!=false);

}

//accessors and mutators

public void setaccessname(String t){

this.name=t;

}

public String getaccessname(){

return this.name;

}

public void setaccessage(int y){

this.age=y;

}

public int getaccessage(){

return this.age;

}

public void setaccessssn(String y){

this.ssn=y;

}

public String getaccessssn(){

return this.ssn;

}

public void getPaid(){

}

public void getVac(){

}

//tostring method

public String toString1(){

String output= " ";

output+= "\n name : " + name + "\n age:" + age + " \n ssn : " + ssn + "\n is alive" ;

return output;

}

}

//professor class

public class Proff extends Person{

public String fac\_id;

public String res\_area;

public int salary;

public int num\_vac;

//constructor

public Proff(String n,int a,String s,boolean al,String f,String r,int sa,int nu){

super(n,a,s,al);

this.fac\_id=f;

this.res\_area=r;

this.salary=sa;

this.num\_vac=nu;

}

//tostring method

public String toString1(){

System.out.println(super.toString1());

return ("\n");

}

public void getPaid(){

System.out.println(" The monthly income is:" + salary);

}

public void getVac(){

System.out.println(" This person is eligible for "+num\_vac+" months vacation");

}

}

//secretary class

public class Secretary extends Person{

public String fac\_id;

public String res\_area;

public int salary;

public int num\_vac;

//construtor

public Secretary(String n,int a,String s,boolean al,String f,String r,int sa,int nu){

super(n,a,s,al);

this.fac\_id=f;

this.res\_area=r;

this.salary=sa;

this.num\_vac=nu;

}

//tostring method

public String toString1(){

System.out.println(super.toString1());

return ("\n");

}

public void getPaid(){

System.out.println(" The weekly income is:" + salary);

}

public void getVac(){

System.out.println(" This person is eligible for "+num\_vac+" month vacation");

}

}

//student class

public class Student extends Person{

public String fac\_id;

public String res\_area;

public int salary;

public int num\_vac;

//constructors

public Student(String n,int a,String s,boolean al,String f,String r,int sa,int nu){

super(n,a,s,al);

this.fac\_id=f;

this.res\_area=r;

this.salary=sa;

this.num\_vac=nu;

}

//tostring method

public String toString1(){

System.out.println(super.toString1());

return ("\n");

}

public void getPaid(){

System.out.println(" The hourly income is:" + salary);

}

public void getVac(){

System.out.println(" This person is eligible for "+num\_vac+" weekend vacation");

}

}

//driver class

public class Driver{

public void getinfo(Person p){

p.toString1();

p.getPaid();

p.getVac();

}

//main method

public static void main(String[] args){

Proff p1=new Proff("neeraj",62,"qrwy12",true,"prof1","R&d",5000,3);

Secretary p2=new Secretary("tony",32,"hjghjgh657",true,"sec1","office",1000,1);

Student p3=new Student("sasi",22,"olmnn756",true,"stud1","R&d",50,1);

Driver p=new Driver();

p.getinfo(p1);

p.getinfo(p2);

p.getinfo(p3);

}

}