public class Person {

private String firstname;

private String lastname;

private String Address;

protected int id;

public Person (){

firstname="";

lastname="";

Address="";

id=0;

}

public Person (String firstname, String lastname, String Address, int id ){

this.firstname=firstname;

this.lastname=lastname;

this.Address=Address;

this.id = id;

}

public void setfirstname (String firstname){

this.firstname = firstname;

}

public String getfirstname() {

return firstname;

}

public void setlastname( String lastname){

this.lastname= lastname;

}

public String getlastname() {

return lastname;

}

public void setAddress(String Address){

this.Address = Address;

}

public String getAddress(){

return Address;

}

public void setid(int id){

this.id=id;

}

public int getid(){

return id;

}

public void display(){

System.out.println("First name: " + firstname );

System.out.println("Last name: " + lastname );

System.out.println("Address: " + Address );

System.out.println("ID: " + id );

}

}

public class Emp extends Person {

private String jobtitle ;

public Emp(String firstname, String lastname, String Address, int id,String j) {

super (firstname,lastname,Address,id);

jobtitle =j ;

}

public Emp(String j ){

jobtitle = j ;

}

void setjobtitle(String j){

jobtitle = j ;

}

String getjob(){

return jobtitle ;

}

public void display(){

super.display();

System.out.println("jobtitle"+jobtitle);

}

}

public class stud extends Person{

private double gpa;

public void setgpa (double gpa){

this.gpa =gpa;

}

public double getgpa(){

return gpa;

}

public stud(String firstname, String lastname, String Address, int id,double gpa) {

super (firstname,lastname,Address,id);

this.gpa =gpa ;

}

public stud(double gpa ){

this.gpa = gpa ;

}

public void display (){

super.display();

System.out.println("gpa is"+gpa);

}

}

public class TestPerson {  
  
  
        public static void main(String[] args) {  
                stud S1 = new stud("AA","BB","Riyadh",2012,3.5);  
                Emp e1 = new Emp ("AA","BB","Riyadh",2012"manager");  
                S1.display();  
                e1.display();  
  
        }  
  
}