**Question:**

Part 1) Create a class Student that contains the following:

1. Three attributes: name(String),ID(int)and mark(int)
2. A method printInfo that will print student informations(all attributes values)
3. A method pass that will return true is the student pass and false if the student fails
4. Draw UML class diagram for class Student.

Part 2) In the main method write code to do the following:

1. Create three object from class Student: (name : “Ahmad”,ID: 1212, mark: 70), (name : “Sami”,ID: 1131, mark: 40) and (name : “Ali”,ID: 5111, mark: 90)
2. Print the name, ID and mark for each student using student class methods
3. For each student object created above print if the student is pass or not using student class methods

**Solution:**

public class Student {

 public String name;

 public int ID;

 public int mark;

 public void printInfo()

 {

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

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

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

 }

 public boolean pass()

 {

 return (mark>=50);

 }

}

UML class diagram for class Student:

|  |
| --- |
| Student |
| + name : String+ ID : int+ mark : int |
| + printInfo() : void+ pass() : boolean |

public static void main(String[] args) {

 // TODO code application logic here

 Student s1 = new Student();

 s1.name = "Ahmad";

 s1.ID = 1212;

 s1.mark = 70;

 Student s2 = new Student();

 s2.name = "Sami";

 s2.ID = 1131;

 s2.mark = 40;

 Student s3 = new Student();

 s3.name = "Ali";

 s3.ID = 5111;

 s3.mark = 90;

s1.printInfo();

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

 s2.printInfo();

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

 s3.printInfo();

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

 if(s1.pass())

 System.out.println("pass");

 else

 System.out.println("fail");

 if(s2.pass())

 System.out.println("pass");

 else

 System.out.println("fail");

 if(s3.pass())

 System.out.println("pass");

 else

 System.out.println("fail");

 }