## Lab-exam

## 2347139

## December 12, 2023

```
interface studeInter {
       public void firstClass();
       public void checkAttendence();
   }
   abstract class Person {
       String name;
       int age;
11
12
       int height;
       public void get(String name, int age, int height) {
14
           this.name = name;
           this.age = age;
           this.height = height;
       public void show() {
20
           System.out.println("Name of the Person is " + name);
21
           System.out.println("Age of the Person" + name + "is" + age);
           System.out.println("height of the Person" + name + "is" +
23
               height);
       }
24
       abstract void formatDOB(int d, int m, int y);
26
   }
27
   class Student extends Person {
       static int studId;
30
       String institutionName;
       double phoneNumber;
32
33
       public void get(String institutionName, double phoneNumber) {
34
           this.institutionName = institutionName;
35
           this.phoneNumber = phoneNumber;
```

```
}
37
38
       public void show() {
39
           System.out.println("Student id is " + studId);
40
41
           System.out.println("institution Name of the student " + studId +
               "is" + age);
           System.out.println("Phone number of the student ID " + studId +
43
                " is " + phoneNumber);
       }
44
       void formatDOB(int d, int m, int y) {
           int today = 2023;
           int age = today - y;
48
           System.out.println("Calculated age of the student from DOB is" +
49
               age);
       }
50
   }
51
52
   class GraduateStudent extends Student implements studeInter {
53
54
       GraduateStudent() {
           super.show();
56
       }
       final String programName = "MCA";
       int noOfSubjects;
60
       String classTeacherName;
61
       int marks;
62
       int attendance;
63
64
       public void get(int noOfSubjects, String classTeacherName, int
            marks, int attendance) {
           // this.programName = programName;
66
           this.noOfSubjects = noOfSubjects;
67
           this.classTeacherName = classTeacherName;
           this.marks = marks;
           this.attendance = attendance;
       }
73
       public void show() {
74
           System.out.println("The program name is " + programName);
75
           System.out.println("Number of subjects in the program " +
76
               noOfSubjects);
           System.out.println("Class teacher name " + classTeacherName);
           System.out.println("Marks " + marks);
           System.out.println("Have enough attendence" + attendance);
79
80
       }
81
```

```
82
        public void firstClass() {
83
            if (marks >= 60) {
84
                show();
85
            }
        }
        public void checkAttendence() {
89
            if (marks >= 75) {
90
                show();
91
            }
        }
93
94
    }
95
96
    class Main {
97
        public static void main(String[] args) {
98
            Student[] stud;
99
            stud = new Student[5];
100
            stud[0] = new Student();
            Student.studId = 01;
            stud[0].get("christ university", 988658954);
104
            stud[0].show();
105
            stud[1] = new Student();
107
            Student.studId = 02;
108
            stud[1].get("SJC", 988658954);
            stud[1].show();
111
            stud[2] = new Student();
112
113
            Student.studId = 02;
114
            stud[2].get("PES university", 989989876);
            stud[2].show();
116
            stud[3] = new Student();
117
            Student.studId = 03;
118
            stud[3].get("Bishop cottons", 988658954);
119
            stud[3].show();
120
121
            stud[4] = new Student();
            Student.studId = 04;
123
            stud[4].get("Kristu jayanthi", 988658954);
124
            stud[4].show();
125
126
127
            // graduate Student
128
            GraduateStudent[] gStud;
            gStud = new GraduateStudent[4];
129
130
            gStud[0] = new GraduateStudent();
```

```
gStud[0].get(7, "abc", 65, 75);
// gStud[0].show();
gStud[0].firstClass();
gStud[0].checkAttendence();

// gStud[0].show();
gStud[0].show();
// gStud[0].show();
```

## Output

```
Ω
                  punith@punith:~/usr-local/02-sem/java/lab-exam Q
mi ► ~/u/02-sem/java/lab-exam > java Main
Student id is 1
institution Name of the student 1is0
Phone number of the student ID 1 is 9.88658954E8
Student id is 2
institution Name of the student 2is0
Phone number of the student ID 2 is 9.88658954E8
Student id is 2
institution Name of the student 2is0
Phone number of the student ID 2 is 9.89989876E8
Student id is 3
institution Name of the student 3is0
Phone number of the student ID 3 is 9.88658954E8
Student id is 4
institution Name of the student 4is0
Phone number of the student ID 4 is 9.88658954E8
Student id is 4
institution Name of the student 4is0
Phone number of the student ID 4 is 0.0
The program name is MCA
Number of subjects in the program 7
Class teacher name abc
Marks 65
Have enough attendence75
```