

```
import java.util.Scanner;

abstract class students {
    int[] testScores = new int[4];
    String testResult;
    String studentName;
    Scanner s = new Scanner(System.in);

    abstract void generateResults();

    students(String name) {
        studentName = name;
    }

    void setTestScores() {
        for (int i = 0; i < 4; i++) {
            System.out.println("Enter test scores " + (i +
1));
            testScores[i] = s.nextInt();
        }
    }

    public String getStudentName() {
        return studentName;
    }

    public int getTestScores() {
        int sum = 0;
        for (int i : testScores) {
            sum += i;
        }
        return sum;
    }
}
```

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    }

}

class undergraduateStudent extends students {
    undergraduateStudent(String name) {
        super(name);
    }

    void generateResults() {
        String st;
        if (getTestScores() / 4 >= 60) {
            st = "pass";
        } else {
            st = "fail";
        }
        testResult = "student name: " + studentName + "\n
test result: " + st;
        System.out.println(testResult);
    }
}

class graduateStudent extends students {
    graduateStudent(String name) {
        super(name);
    }

    void generateResults() {
        String st;
        if (getTestScores() / 4 >= 70) {
            st = "pass";
        } else {

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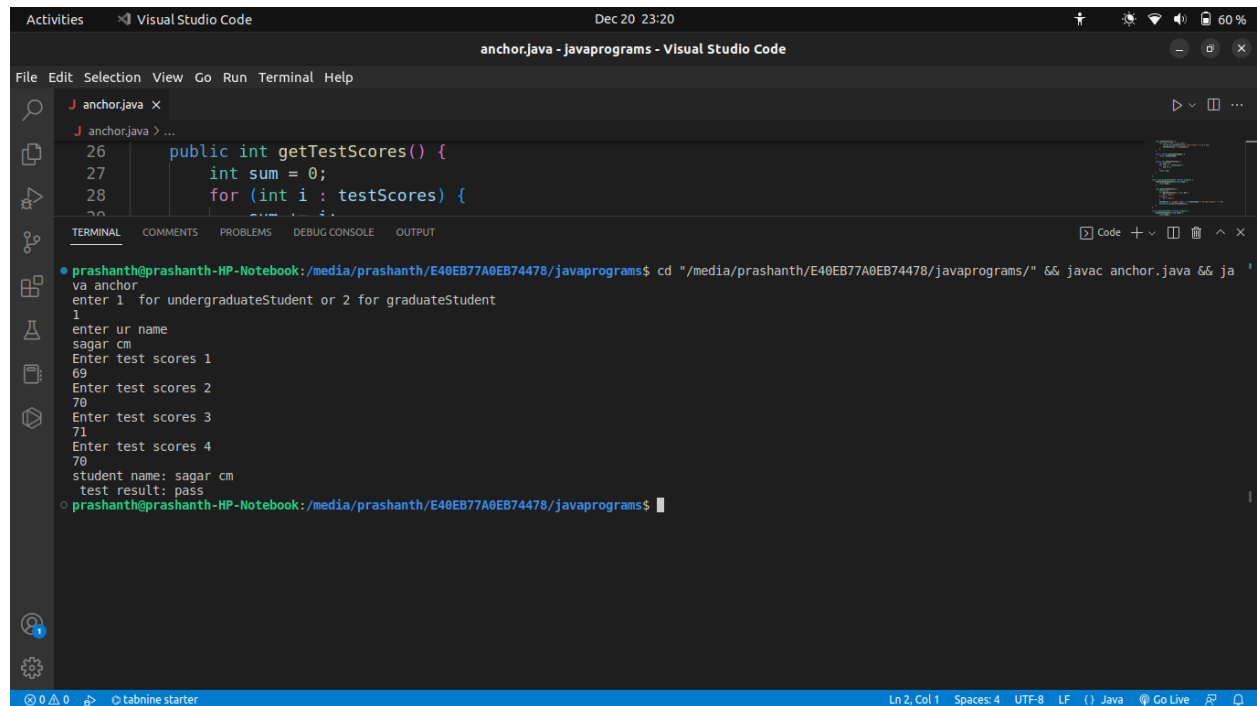
        st = "fail";
    }
    testResult = "student name: " + studentName + "\n
test result: " + st;
    System.out.println(testResult);
}
}

public class anchor {
    public static void main(String[] args) {
        System.out.println("enter 1 for
undergraduateStudent or 2 for graduateStudent");
        Scanner st = new Scanner(System.in);
        int i = st.nextInt();
        st.nextLine();
        System.out.println("enter ur name");
        if (i == 1) {
            undergraduateStudent u = new
undergraduateStudent(st.nextLine());
            u.setTestScores();
            u.generateResults();
        }
        else if (i == 2) {
            graduateStudent g = new
graduateStudent(st.nextLine());
            g.setTestScores();
            g.generateResults();
        }else{
            System.out.println("Invalid input");
        }
        st.close();
    }
}

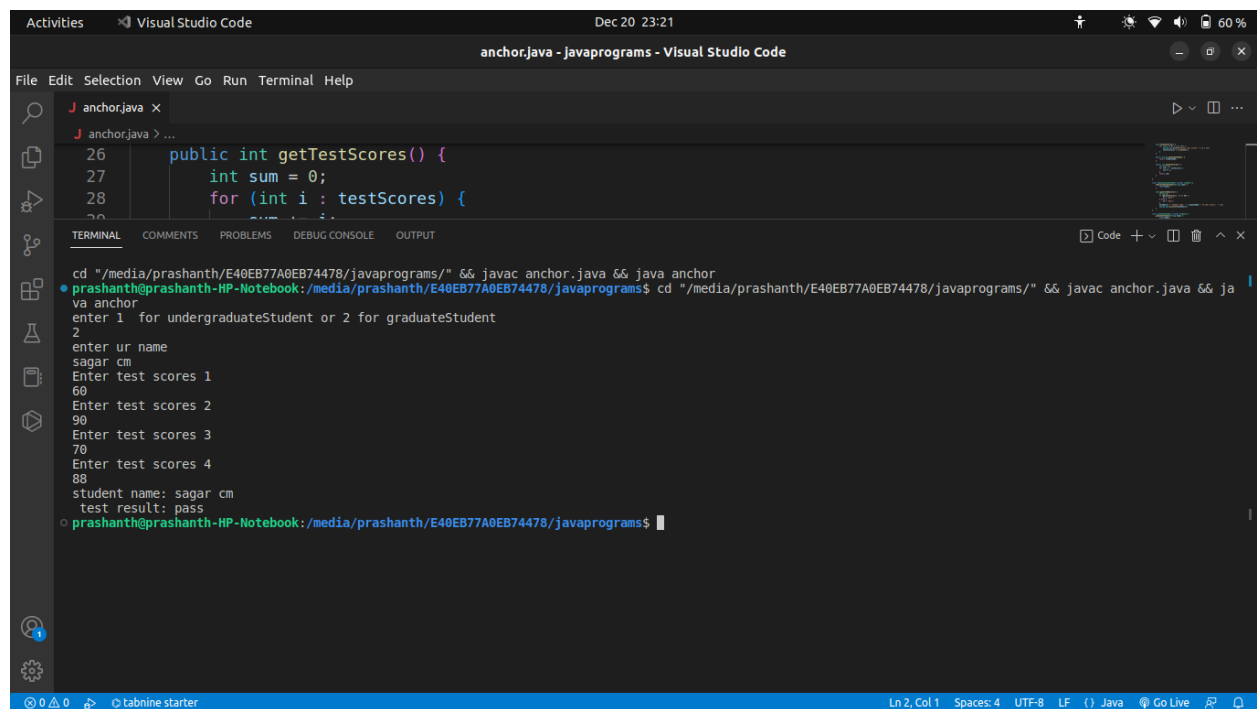
```

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}
```

Output



```
Activities Visual Studio Code Dec 20 23:20 anchor.java - javaprograms - Visual Studio Code
File Edit Selection View Go Run Terminal Help
J anchor.java x
J anchor.java > ...
26 public int getTestScores() {
27     int sum = 0;
28     for (int i : testScores) {
29         sum += testScores[i];
30     }
31     return sum;
32 }
33
TERMINAL COMMENTS PROBLEMS DEBUG CONSOLE OUTPUT
prashanth@prashanth-HP-Notebook:/media/prashanth/E40EB77A0EB74478/javaprograms$ cd "/media/prashanth/E40EB77A0EB74478/javaprograms/" && javac anchor.java && java anchor
va anchor
enter 1 for undergraduateStudent or 2 for graduateStudent
1
enter ur name
sagar cm
Enter test scores 1
69
Enter test scores 2
70
Enter test scores 3
71
Enter test scores 4
70
student name: sagar cm
test result: pass
prashanth@prashanth-HP-Notebook:/media/prashanth/E40EB77A0EB74478/javaprograms$
```



```
Activities Visual Studio Code Dec 20 23:21 anchor.java - javaprograms - Visual Studio Code
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TERMINAL COMMENTS PROBLEMS DEBUG CONSOLE OUTPUT
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va anchor
enter 1 for undergraduateStudent or 2 for graduateStudent
2
enter ur name
sagar cm
Enter test scores 1
60
Enter test scores 2
90
Enter test scores 3
70
Enter test scores 4
80
student name: sagar cm
test result: pass
prashanth@prashanth-HP-Notebook:/media/prashanth/E40EB77A0EB74478/javaprograms$
```