

# ERROR LOGS (COURSE GRADES)

```
package Mastery;

import java.util.Scanner;

public class CourseGrades {

    public static void main(String[] args) {

        int num; //declare num variable, used later
        int testchoice; //declare testchoice, used later
        Scanner input = new Scanner(System.in); //import scanner to allow for user input

        GradeBook studgrades = new GradeBook(); //object "studgrades" is used to call methods from the GradeBook

        studgrades.GetGrades(); //prompts user to enter grades for each student
        studgrades.ShowGrades(); //shows the user, the grades for each student


        System.out.println("Enter a number from the student you want to see the average of (students 1-12): ");
        num = input.nextInt(); // ask user for which students average they want to look at


        System.out.println("Student " + num + "'s average is " + studgrades.studAVG(num) + "%");
        //display average of chosen student


        System.out.println("Enter which tests average you would like to see. (1-5):");
        testchoice = input.nextInt(); //ask user for which test's average they want to look at


        System.out.println("Test " + testchoice + "'s average is " + studgrades.testAVG(testchoice) + "%." );
        //display average of chosen test
    }
}
```

```

package Mastery;

import java.util.Scanner;

public class GradeBook {

    Scanner input = new Scanner(System.in); //import scanner for user input
    private int[][] grades; // 2d array storing grades for 12 students and 5 tests

    public GradeBook() {
        grades = new int[12][5]; //initialize the amount of values the array will take
    }

    public void GetGrades() { //method when called is used to ask user for grades of each student
        for (int student = 0; student < grades.length; student++){ //method goes through each student
            System.out.println("Enter student " + (student + 1) + "'s grades:"); //ask for grades

            for (int test = 0; test < grades[student].length; test++) {
                System.out.println("Test " + (test + 1) + ": ");
                grades[student][test] = input.nextInt();
            }
        }
    }

    public void ShowGrades() { //method when called prints the test value for each student
        System.out.println("Gradebook:");
        for (int student = 0; student < grades.length; student++) { //until student is done
            System.out.println("Student" + (student + 1) + ": ");

            for (int test = 0; test < grades[student].length; test++) { //loops until each test is done
                System.out.println(grades[student][test] + " ");
            }
            System.out.println(""); //space to make the code cleaner each time it loops
        }
    }
}

```

```

    public double studAVG(int num) { //method calculates the average of the chosen student
        int studindex = num - 1; //gets the index of the student

        int sum = 0;

        for (int test = 0; test < grades[studindex].length; test++) {
            sum+= grades[studindex][test];
        }
        return (double) sum / grades[studindex].length; //returns the students average
    }

    public double testAVG(int testchoice) { //This method when called, calculates the average of the test
        int testindex = testchoice - 1; //gets index of the test

        int sum = 0;

        for (int student = 0; student < grades.length; student++) {
            sum+= grades[student][testindex];
        }
        return (double) sum / grades.length; //returns the average of the test
    }
}

```

NO ERRORS THROUGHOUT THIS CODE