CourseGrades ErrorLogs-

Had an error where the student number was displaying incorrectly, so I added brackets around the (j+1) and (i+1) values which seemed to fix it

```
Enter student 01 grades - 50
Enter student 11 grades - 60
Enter student 21 grades - 70
Enter student 31 grades - 80
Enter student 41 grades - 90
Enter student 01 grades -
```

```
for (int i = 0; i < 12; i++) {
    for (int j = 0; j < 5; j++) {
        System.out.print("Enter student " + j+1 + " grades - ");
        int x = Input.nextInt();
        GradeBook[i][j] = x;
    }
```

```
for (int i = 0; i < GradeBook.length; i++) {
    for (int j = 0; j < GradeBook[0].length ; j++) {
        System.out.print("Enter student " + (j+1) + " grades for course " + (i+1) + " - ");
        int x = Input.nextInt();
        GradeBook[i][j] = x;
    }
```

The array was somehow empty, so I shifted the array to be in the GradeBook file not the test one, since the GradeBook had all the methods and functions of the program.

```
Enter student 4 grades for course 5 - 100

Exception in thread "main" java.lang.NullPointerException: Cannot read the array length because "this.GradeBook" is null
      at Mastery.GradeBook.showGrades(GradeBook.java:8)
      at Mastery.CourseGrades.main(CourseGrades.java:36)
```

```
public class GradeBook {

    private int[][] GradeBook;

    // GradeBook method with students and grades
    public GradeBook(int grades, int students) {
        GradeBook = new int[grades][students];
    }
```

Then, ran into an error where the student average value being calculated was incorrect (going from column to column rather than row to row)

```
10 20 30
20 30 40
30 40 50
40 50 60
50 60 70

Enter student number to see average - 1
Student 1 average is 60
```

Made sure the average being calculated was row to row, and also changed it from integer to double values for more accurate results

```
public void studentAvg(int num) {
    // Student Average
    double avg = 0;
    double sum = 0;
    for (int i = 0; i < GradeBook.length; i++) {
        sum += GradeBook[i][num-1];
    }
  System.out.print("Student " + (num) + " average is ");
  // Average is the sum divided by number of tests
  avg = sum/GradeBook.length;
  System.out.print(avg);
}
```