Assignment 9

- 1. Read Lesson 9 (Blackboard) on <u>arrays</u>, Lesson 9 Part 2 on **String** operations and from the textbook read Chapter 8, pages 521-544.
- 2. Write the string operation needed to insert the string "OR NOT" (notice the space at the end) into

```
string st1 = "we will erase some characters";
```

so that, after that operation, if we display string st1, the output is

```
we wOR NOT ill erase some characters
```

3. Write the string *erase* operation that would change

```
string st1 = "we will erase some characters";
so that when it is displayed after the erase operation, the output is
```

we wrase some characters

4- Program:

A student is taking 3 courses: Course 1, Course 2 and Course 3. Each course is graded using 4 tests: Test 1, Test 2, Test 3 and Final Exam. The final score in each course is the average of the scores in the four tests. John Doe's scores in the four courses are as follows:

| | Test 1 | Test 2 | Test 3 | Final Exam |
|----------|--------|--------|--------|------------|
| Course 1 | 70 | 85 | 67 | 90 |
| Course 2 | 60 | 63 | 72 | 70 |
| Course 3 | 90 | 87 | 93 | 80 |

You can represent this using a two-dimensional array.

Assuming the scores are always positive integers between 0 and 100:

```
int scores[3][4] = \{ \{70, 85, 67, 90\}, \{60, 63, 72, 70\}, \{90, 87, 93, 80\} \};
```

Your output should be similar to (but doesn't have to look exactly the same as)

Average course 1 78

Average course 2 66

Average course 3 88

The averages are rounded to the nearest int.

All the calculations MUST be carried out using the two-dimensional array *scores* presented above by means of loops that collect, for one course at a time, the scores on that course, finds their average and display the result. Then it loops back to the second course, etc.