

2D Arrays

Section 10.3 – C-Strings

Section 7.9 – 2D arrays

Two-dimensional arrays

- Consider

```
int intArray[][2] = {{1, 2}, {3, 4}};  
double doubleArray[10][5];
```

1. What are the index values for each array?
2. How many elements does each array have?
3. Show how **doubleArray** is passed to a function and what a function prototype might look like.

Quiz Grader

- A data file (quiz.txt) contains an unknown number (but at most 100) of quiz data, where each line contains 10 answers to true/false questions (1 is true, 0 is false)
 - Sample file

```
0 1 1 0 1 0 1 1 0 1
0 1 0 1 0 1 1 1 0 0
1 1 0 1 1 1 0 0 1 0
1 0 1 0 1 0 1 0 1 0
0 1 1 0 1 1 1 1 1 1
```

Quiz Grader

- Write a C++ program that:
 - loads a 2D array with the quiz answers
 - Allows the user to type in the correct answers from the keyboard and place these in a 1D array
- Print the number of students that achieved a full score on the quiz (matched all numbers). Naturally, order is important.