Problem

Create a program that determines grades at the end of the semester. (Data processing)

Specifications

1. Construct a 5 x 7 two-dimensional array based on the following table

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Student | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Ave | Wt Ave |
| 1 | 85 | 88 | 90 | 81 |  |  |
| 2 | 73 | 68 | 75 | 77 |  |  |
| 3 | 94 | 89 | 82 | 91 |  |  |
| 4 | 88 | 79 | 81 | 84 |  |  |
| 5 | 71 | 65 | 78 | 73 |  |  |

1. Populate the table by reading the grades stored in [grades.txthttps://slcc.instructure.com/images/preview.pnghttps://slcc.instructure.com/images/popout.png](https://slcc.instructure.com/courses/202748/files/29701224/download?wrap=1).
2. Calculate the average for each student and store it in the **Ave** column.
3. Calculate the weighted average for each student(the first grade gets a weight of .2, the second a weight of .3, the third a weight of .3, and the fourth a weight of .2) and store it in the **Wt Ave** column.
4. Pass the array to a function that rearranges the rows (each student) in ascending order based on the weighted average.
5. Output the contents of the entire array neatly formatted in columns and rows with appropriate row and column labels.
6. After displaying the grades, write the entire array to a file called final\_grades.txt

Admin

1. Grading
   * 0 points if your program does not compile.
   * +5 for comments, indentation and placement of {} per [Style Guide](http://www.cs.slcc.edu/style-guide.shtml).
   * +5 for each specification met.
2. Submission: Attach your .cpp file and final\_grades.txt file then submit.