Pair Programming 7 Tests

# Instructions

* **Always use the pair programming tests to ensure your program works properly.**
* **Take a screen shot with a white background of each execution in the tests.**
* **Only share with your partner work that you did together.**

7a. (1.5 points) Execute your program and compare its output to the Expected Output column.

|  |  |
| --- | --- |
| **Input** | **Expected Output** |
| Set MAX\_STUDENTS = 5 and initialize the array of grades as follows:  double grades[MAX\_STUDENTS] = { 99.9, 65.7, 87.8, 96.1, 56.8 }; | 99.9  65.7  87.8  96.1  56.8  Average: 81.26 |
| Challenge: set MAX\_STUDENT = 5 and initialize array to hold the following grades, in order:  { 56.8, 65.7, 87.8, 96.1, 99.9 } | 56.8  67.5  87.8  96.1  99.9  Average: 81.26  Median: 87.8 |
| Challenge: set MAX\_STUDENT = 6 and initialize array to hold the following grades, in order:  { 56.8, 67.5, 87.8, 88.8, 96.1, 99.9 } | 56.8  67.5  87.8  88.8  96.1  99.9  Average = 82.82  Median: 88.3 |

7b. (1.5 points) Execute your program and compare its output to the Expected Output column.

|  |  |
| --- | --- |
| **Input** | **Expected Output** |
| No input | powers[0] = 1  powers[1] = 2  powers[2] = 4  powers[3] = 8  powers[4] = 16  powers[5] = 32  powers[6] = 64  powers[7] = 128  powers[8] = 256  powers[9] = 512  powers[10] = 1024 |

7c. (1.5 points) Execute your program and compare its output to the Expected Output column.

|  |  |
| --- | --- |
| **Input** | **Expected Output** |
| Enter the following numbers (exactly 10 – and verify that you aren’t prompted for the 11th number)  1.11, 99.9, 123.45, 12.345, 12.111, 98.7, 0, 1, 55.5, 45.999 | Enter number (-1 to end): 1.11  Enter number (-1 to end): 99.9  Enter number (-1 to end): 123.45  Enter number (-1 to end): 12.345  Enter number (-1 to end): 12.111  Enter number (-1 to end): 98.7  Enter number (-1 to end): 0  Enter number (-1 to end): 1  Enter number (-1 to end): 55.5  Enter number (-1 to end): 45.999  $1.11  $99.90  $123.45  $12.35  $12.11  $98.70  $0.00  $1.00  $55.50  $46.00 |
| Enter the following numbers (less than 10)  45.999, 12.111, 98.7, -1 | Enter number (-1 to end): 45.999  Enter number (-1 to end): 12.111  Enter number (-1 to end): 98.7  Enter number (-1 to end): -1  $46.00  $12.11  $98.70 |

7d. (1.5 points) Execute your program and compare its output to the Expected Output column.

|  |  |
| --- | --- |
| **Input** | **Expected Output** |
| Enter the following numbers (exactly 10 – and verify that you aren’t prompted for the 11th number)  1.11, 99.9, 123.45, 12.345, 12.111, 98.7, 0, 1, 55.5, 45.999 | Enter number (-1 to end): 1.11  Enter number (-1 to end): 99.9  Enter number (-1 to end): 123.45  Enter number (-1 to end): 12.345  Enter number (-1 to end): 12.111  Enter number (-1 to end): 98.7  Enter number (-1 to end): 0  Enter number (-1 to end): 1  Enter number (-1 to end): 55.5  Enter number (-1 to end): 45.999  $1.11  $99.90  $123.45  $12.35  $12.11  $98.70  $0.00  $1.00  $55.50  $46.00 |
| Enter the following numbers (less than 10)  45.999, 12.111, 98.7 -1 | Enter number (-1 to end): 45.999  Enter number (-1 to end): 12.111  Enter number (-1 to end): 98.7  Enter number (-1 to end): -1  $46.00  $12.11  $98.70 |

7e. (2 points) Execute your program and compare its output to the Expected Output column.

|  |  |
| --- | --- |
| **Input** | **Expected Output** |
| In the code, initialize the array with values: 12, 1, 0, -5, 6, 8, 10, 18  Enter a key of -5 | Found element -5 at index 3 |
| In the code, initialize the array with values: 12, 1, 0, -5, 6, 8, 10, 18  Enter a key of 18 | Found element 18 at index 7 |
| In the code, initialize the array with values: 12, 1, 0, -5, 6, 8, 10, 18  Enter a key of 2 | Not found |

7f. (2 points) Execute your program and compare its output to the Expected Output column.

|  |  |
| --- | --- |
| **Input** | **Expected Output** |
| Initialize the array with the following values in this order:  12, 1, 0, -5, 6, 8, 18, 10 | -5 0 1 6 8 10 12 18 |