Pair Programming 3 Tests

# Instructions

* **Always use the pair programming tests to ensure your program works properly.**
* **Take a screen shot of each execution in the tests.**
* **Only share with your partner work that you did together. Do not share with other pairs.**

3a. (2 points) Execute your program and compare its output to the Expected Output column.

|  |  |
| --- | --- |
| **Input** | **Expected Output** |
| Enter 0 for hours and verify program ends with no salary printed. | Enter hours (0 to end): 0 |
| Enter 38.8 for hours and 10.1 for rate [The program shouldn’t end but should prompt for the next hours] | Enter hours (0 to end): 38.8  Enter rate: 10.1  Salary is $391.88 |
| Enter 40 for hours and 7.35 for rate [The program shouldn’t end but should prompt for the next hours] | Enter hours (0 to end): 40  Enter rate: 7.35  Salary is $294.00 |
| Enter 55.5 for hours and 15.9 for rate then 0 to end program  [The correct answer rounded up is really $1005.68 but the computer can’t store 0.1 or 0.01, etc. precisely and, in this small program, has a rounding error.] | Enter hours (0 to end): 55.5  Enter rate: 15.9  Salary is $1005.67  Enter hours (0 to end): 0 |

3b**.** (2 points) Execute your program and compare its output to the Expected Output column.

|  |  |
| --- | --- |
| **Input** | **Expected Output** |
| Enter -1 for n [The program should not produce any output] | Enter n: -1 |
| Enter 0 for n | Enter n: 0  0 1 |
| Enter 5 for n | Enter n: 5  0 1  1 2  2 4  3 8  4 16  5 32 |

3c. (3 points) Execute your program and compare its output to the Expected Output column.

|  |  |
| --- | --- |
| **Input** | **Expected Output** |
| Enter 0 for n | Enter n: 0  0! is 1 |
| Enter 1 for n | Enter n: 1  1! is 1 |
| Enter 5 for n | Enter n: 5  5! is 120 |
| Enter 20 for n  [20! can’t be computed using integers because 20! is too large to fit in an int. So, change the product variable to a double but set the precision, etc. so it prints as an integer.] | Enter n: 20  20! is 2432902008176640000 |

3d. (3 points) Execute your program and compare its output to the Expected Output column. Note that your output messages may differ due to permitted creativity.

|  |  |
| --- | --- |
| **Input** | **Expected Output** |
| Enter q to quit [The program should produce no output.] | H hardwood  L laminate  E engineered hardwood  Q quit  Choice: q |
| Enter h for hardwood [The program shouldn’t end but should print the menu and prompt for the next wood choice.] | H hardwood  L laminate  E engineered hardwood  Q quit  Choice: h  You ordered hardwood |
| Enter H for hardwood [The program shouldn’t end but should print the menu and prompt for the next wood choice.] | H hardwood  L laminate  E engineered hardwood  Q quit  Choice: H  You ordered hardwood |
| Enter l for laminate [The program shouldn’t end but should print the menu and prompt for the next wood choice.] | H hardwood  L laminate  E engineered hardwood  Q quit  Choice: l  You ordered laminate |
| Enter L for laminate [The program shouldn’t end but should print the menu and prompt for the next wood choice] | H hardwood  L laminate  E engineered hardwood  Q quit  Choice: L  You ordered laminate |
| Enter e for engineered hardwood [The program shouldn’t end but should print the menu and prompt for the next wood choice.] | H hardwood  L laminate  E engineered hardwood  Q quit  Choice: e  You ordered engineered hardwood |
| Enter E for engineered hardwood [The program shouldn’t end but should print the menu and prompt for the next wood choice.] | H hardwood  L laminate  E engineered hardwood  Q quit  Choice: E  You ordered engineered hardwood |
| Enter x [The program shouldn’t end but should print the menu and prompt for the next wood choice.] | H hardwood  L laminate  E engineered hardwood  Q quit  Choice: x  Invalid choice: x |
| Enter Q to quit and verify program ends | H hardwood  L laminate  E engineered hardwood  Q quit  Choice: Q |