Software Sales

**Due: Sun Feb 18, 2024 11:59pm**

A software company sells a package that retails for $99. Quantity discounts are given according to the following table.

|  |  |
| --- | --- |
| Quantity | Discount |
| 10–19 | 20% |
| 20–49 | 30% |
| 50–99 | 40% |
| 100 or more | 50% |

Write a program that asks for the number of units sold and computes the total cost of the purchase.

Be efficient! Points will be deducted for a program that requires more test (e.g., if statements) than necessary to be executed.

Now that you know how to validate input we will add input validation to the requirements for all code in this class. Here is the complete list of requirements for code:

* **Good style:** Use good naming conventions. Use constants, not magic numbers.
* **Usability:** Always prompt the user for input so they know what to do and provide meaningful output messages.
* **Input Validation:** The program should not accept invalid input. In this case end the program early if the user enters a negative quantity. We will learn better ways of dealing with invalid input in the next module.
* **Documentation:** Add a comments that document what each part of your code does.
* **Testing:** Don't submit your solution until you have tested it. The code must compile, execute and produce the correct output for any input.

Submit only the .cpp file containing the code, call it **SoftwareSalesLastName.cpp**.