CIS 121 Sequence Problems

Develop an IPO Chart and C++ code the following problems. Upload the IPO and code files to Blackboard.

Save your files with the convention PS2P1, PS2P2 etc. PS1P1 is Problem set 1, program 1 etc.

1. Allow the user to enter the quantity and unit price (price per item). Compute extended price (quantity x price). Display the extended price.

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| --- | --- | --- |
| Input | Process | Output |
| Quantity (how much they want) | Q times P | Solution = Q times P |
| Price of that item |  |  |
|  |  |  |
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1. Allow the user to enter last name, hours and pay rate. Compute gross pay to be hours x rate. (Note: we are not giving time and a half for over time hours yet!). Display last name and gross pay.

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| Input | Process | Output |
| Last name | Pay \* hour = x | you have a grossings of x |
| Hours |  |  |
| Pay per hour |  |  |
|  |  |  |
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1. The user is to enter the length and width of a rectangle. Computer the area (length x width) and the circumference (2 x length + 2 x width). Display the area ad circumference.

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| Input | Process | Output |
| Length | 2 x length + 2 x width = circumference | Area & cimcumference |
| Width | L times W = area |  |
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1. Enter last name and credits taken. Tuition is $250 per credit hour. Add a $100 lab fee. Compute total tuition (credits taken x 250 + lab fee). Display last name and tuition.

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| --- | --- | --- |
| Input | Process | Output |
| lastname | Tuition = (credit x 250) + 100 | Hey lastname, your tuition at triton is x |
| Current credits |  |  |
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1. The price of an item and discount percent is entered into the program. Display the discount amount and discounted price of the item. Note: enter the discount percentage in decimal form.

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| --- | --- | --- |
| Input | Process | Output |
| Price\_of\_item | P times D = money saved  Example:  100 x 0.20 = 20 (how much you are saving) | Discounted\_price (price with discount applied) |
| Double Discount\_percent | Discounted price = P – (P x D) | Money\_saved |
| If discount is 50% off then it would be typed as 0.50 |  |  |
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