CIS 121 Sequence Problems – Elliot DeMerit

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 |
| Qty | Extprice = Qty \* Uprice | Extprice |
| Uprice |  |  |

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 |
| Lname | Gpay = Hrs \* Prate | Msg |
| Hrs | Msg = “Lname, Gross Pay = Gpay” |  |
| Prate |  |  |

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 |
| Lgth | Area = Lgth \* Wdth | Msg |
| Wdth | Circ = (2\*Lgth)+(2\*Wdth) |  |
|  | Msg = “Area = Area, Circumference = Circ” |  |

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 |
| Lname | Tuit = (Crdts\*250) + 100 | Msg |
| Crdts | Msg = “Lname, Total Tuition = $(Tuit)” |  |

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 percent in decimal form.

|  |  |  |
| --- | --- | --- |
| Input | Process | Output |
| Price | Dprice = Price\*(1-Dcount) | Msg |
| Dcount | Dpercent = Dcount \* 100 |  |
|  | Msg = “Discount = Dpercent, Discounted Price = Dprice” |  |