CIS 106 Session Assignments Set 1 Problems.

Develop an IPO Chart for following problems within this document. Then write a Python program for each. Upload the IPO (this document) and the Python files to Github repository in a Week1 folder. Then paste the link to your repository into the Assignment 1 Upload within Blackboard.

Problems to Solve

1. Prompt the user to enter a quantity (which is a floating point number) and price per unit (float). Then computer extended price (quantity x price per unit). Display the extended price.

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| Input | Processing and Storage | Output |
| Quantity of Unit  Price of Unit | Multiply Quantity of Unit and Price of Unit to get Extended Price | Display Extended Price |

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 | Processing and Storage | Output |
| Last Name  Hours  Pay Rate | Multiply Hours by Pay Rate to get Gross Pay | Display Last Name  Display Gross Pay |

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 | Processing and Storage | Output |
| Length of Rectangle  Width of Rectangle | Multiply Length by Width to get Area of Rectangle  Multiply (Length + Width) by 2 to get Circumference of Rectangle | Display Area of Rectangle  Display Circumference of Rectangle |

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 | Processing and Storage | Output |
| Last Name  Credits Taken | Multiply Credits taken by 250 and add 100 to get Tuition | Display Last Name  Display Tuition |

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.

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| Input | Processing and Storage | Output |
| Price of Item  Discount Percent | Divide discount Percent by 100 to get discount decimal  Multiply Discount Decimal by Price of Item to get Discount Amount  Subtract Discount Amount from Price of Item to get Discount Percent. | Display Discount Amount  Display Discounted Price |