

CIS 106 Session Assignments Set 1 Problems.

Develop a IPO for the following problems. Put them into this Word document and save. Upload the document to your GitHub Repository. Finally paste the link to you repository into the assignment upload link in Blackboard for grading.

Save your files with the convention PS2P1, PS2P2 etc. (see syllabus for details on the naming convention).

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.

Input	Process	Output
qty prc_pr_unit	$\text{Ext_prc} = \text{qty} * \text{prc_pr_unit}$	ext_prc

2. 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.

Input	Process	Output
L_nm Hrs py_rt	$\text{Grs_py} = \text{hrs} * \text{py_rt}$	L_nm grs_py

3. The user is to enter the length and width of a rectangle. Computer the area (length x width) and the circumference ($2 \times \text{length} + 2 \times \text{width}$). Display the area ad circumference.

Input	Process	Output
Length width	Area = length * width Circ = $2 * \text{length} + 2 * \text{width}$	Area circ

4. 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.

Input	Process	Output
L_nm credit	Tuition = credit * 250 + 100	L_nm tuition

5. 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
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Price disc_dec	Disc_amnt = price * disc_dec Disc_price = price - disc_amnt	Disc_amnt disc_price
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