

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.

Input	Processing	Output
Quantity	Get Quantity from user input	Extended price
Price per Unit	Get Price per unit from user input	
	Compute the Extended price (Quantity x Unit)	
	Show the extended price	

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	Processing	Output
Last name	Get last name from input	Last name
Hours worked	Get hours worked from input	Gross pay
Pay Rate	Get pay rate from input	
	Compute gross pay	

Input	Processing	Output
	Display gross pay and last name	

3. 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.

Input	Processing	Output
Length	Get length from input	Area
Width	Get width from input	Circumference
	Compute area	
	Compute circumference	
	Show the circumference and area	

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	Processing	Output
Last name	Get last name from input	Last name
Credits	Get credits from input	Total tuition
	Compute the	
	Show tuition and last name	

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	Processing	Output
Price of item	Get price of item from input	Discount price
Percent of discount	Get percent of discount from input	Discount amount
	Comput discount price	
	Show discount amount and the discount price	