

Session Advanced Functions – Create IPO Chart and code for each problem below.

1. The input consists of quantity, price and discount rate. Use a function to compute the discount amount and discounted price. Then display these values in main along with the quantity and price. (The function should return both discount amount and discounted price).

Input	Process	Output	
Quantity	Define a function to compute the discount amount and discounted price	Quantity, Price, discount amount, discounted price	
Price			
Discount Rate			

2. Enter the student's last name and 3 exam scores. Use a function to compute the average and total points. This functions should return both total points and exam score. Display student last name, total points and average exam score.

Input	Process	Output
Last Name	Compute the average and total points	Name, total points, average exam score
Exam score 1		
Exam score 2		
Exam score 3		

3. Produce a sales report. Input salesperson last name and sales. Write a function that compute commission which is 10% for sales over \$100, 000 and 5% for sales at or under \$100,000. The function should also computer next year's target which is 5% of the sales. This function should return both commission and next year's target. Display salesperson name, commission and next year's target.

Input	Process	Output
Salespersons Last Name	Define a function to compute commission and next years target	Name, Commision, Next years target

Sales Amount	If sales are over 100000, the commission is 10%	
	If sales are at or under 100000, the commission is 5%	
	Next years target is 5% of the sales	

4. Enter bowler last name, 3 game scores and handicap. Write a function to compute average score and average score with handicap. Back in main, display last name, average score and average score with handicap.

Input	Process	Output
Name	Compute average score and average with handicap	Name, average score, average score with handicap
3 Games scores	Average score= sum of 3 games/3	
Handicap	Handicap score= average + handicap	

5. Allow the user to enter quantity of an item and unit price. Write a function to compute total (qty * unit price) and tax (7% of total). Demonstrate your knowledge of global variables by making total and tax global in scope. Display total and tax in main.

Input	process	Output
Quantity	Compute total with tax	total
Unit price		tax

