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
qty		
price	Get qty, price, discamt Call compute_disc Input: qty, price, discrete Return/update: discamt, discprice Extprice = qty * price Discamt = extprice * discrete discprice = extprice - discamt	Qty Price Discamt Discprice
discrate		
	Display qty, price, discamt, discprice	

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
lname		
S1, s2, s3	compute_points(s1, s2, s3)	lname Total Avgscore
	Display lname, total, avgscore	

	Compute_points Input: s1, s2, s3 Return: total, avgscore Total = s1 + s2 + s3 Avgscore = total/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
lname		
sales	Compute_salesreport (lname, sales)	Salesper name Commission Nytarget
	Display name, commission, nytarget	

	Input: salesper name, lname, sales
	Return: commission, target
	
	if sales > 100000
	commission = sales * 0.1;
	else
	commission = sales * 0.05;
	
	nextYearTarget = sales * 0.05;	

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

Lname	Get lname, s1, s2, s3, handicap	
S1, s2, s3	compute_avgscore(lname, s1, s2, s3, handi)	Lname AvgS Handiavg
handi		
	Display lname, avgS, handiavg	
	Input: lname, s1, s2, s3, handicap Return: avgS, handiavg avgS = (s1 + s2 + s3) / 3 Handiavg = avg + handi / 3	

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
qty	Global total, tax	
unitpr	Compute_total&tax (qty, unitpr)	Total Tax
	Display total, tax	
	Compute_totaltax Input: qty, unitpr Return: total = qty * unipr; tax = total * 0.07	