

Arab Academy for Science, Technology and
Maritime Transport-College of Computing &
Information Technology—Sheraton branch
Course : Problem Solving and
Programming
Examiner : Dr. Shireen A. Hussein



Academic Year : 2023/2024
Semester : Spring
Department : Computer Science
Time Allowed : 90 Minutes

Lab. Test

Name
Class

Late

15

Write a C program for each of the following problems:

(9 points)

1– A Music store needs a program to implement its music teacher's discount policy on a group of customers (ended with 0). Music teachers receive a 10% discount on their purchases if the total purchases is \$100 or higher , otherwise the discount is 12\$. The discount calculation occurs before addition of the %5 sales tax.

Your program must include the following functions:

1– void Input_Data(double purchase[], char title) This function to prompt the purchases total and a char title to indicate whether the purchases is a teacher ' t ' or ' n '

2– void Display_Receipt() this function is to create a nicely formatted file called " Reciept.txt" for each customer.

There are two sample output files - one for a teacher and one for a nonteacher.

Total purchases	122.68\$
Teacher's discount (12%)	14.64
Discounted total	107.36
Sales tax (5%)	5.37
Total	112.73\$

Total purchases	14.88\$
Sales tax (5%)	1.25
Total	16.13\$

(6 points)

2. Write a program that displays the 26 upper case letters of this alphabet (A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y and Z) with the ASCII (0–255) codes of these characters