Quiz 2, Sp26; Course Code: SE 121; Section: 46 O; Time: 30 Minutes; Marks: 15

1.	A bus company operates intercity services from Dhaka to four destinations: Chittagong (1)(Tk. 800), Sylhet(2) (Tk. 1000), Rajshahi(3) (Tk. 700), and Khulna (4) (Tk. 900). The ticket price is determined by destination, seat type, and passenger category. Non-AC seats (N) have no extra charge, while AC seats (A) require an additional Tk. 300. The company provides discounts based on passenger category: students(S) receive a 10% discount, senior citizens(C) receive a 15% discount, and regular passengers (R) receive no discount. Write a C program that takes destination code, seat type, and passenger category as input, calculates the total fare including any additional seat charge, applies the appropriate discount using decision-making statements, and displays the final payable amount. (Use Switch-case)	**7.5**

Sample Input	**Sample Output**
Enter destination code: 2 Enter seat type (N/A): A Enter passenger category (S/C/R): S	Final Payable Amount: 1170.00 Tk

2. A teacher wants to analyze the performance of students in a class test. The total number of students is entered by the user. For each student, the teacher enters the marks obtained out of 100. The program should use a loop to read all the marks one by one, calculate the total marks and average marks of the class, and determine how many students passed (marks 40 or above) and how many failed. Finally, the program should display the total marks, average marks, number of passed students, and number of failed students.

[Marks – 7.5]

Sample Input	Sample Output
Enter number of students: 2 Enter marks of student 1: 55 Enter marks of student 2: 35	Total Marks: 90 Average Marks: 45.00 Passed Students: 1 Failed Students: 1