

Online 1: Conditional Statement (Set 1)

Time: 35 min + Submission: 5 min

Total Mark: 10 + 10 = 20

Problem 1: Check Whether a Triangle is Valid

Write a C program that checks whether three given sides can form a valid triangle. The program should take three side lengths as input. [Use float]

Sample Input and Output Pair

Input	Output
Enter three sides of a triangle: 5 10 6	Valid
Enter three sides of a triangle: 1 2 5	Invalid

Problem 2: Sales Commission Calculation

Write a C program to calculate the commission of a salesperson based on their sales amount:

- Sales $\leq 20,000$: No commission
- Sales from 20,001 to 50,000: 5% commission
- Sales from 50,001 to 100,000: 7% commission
- Sales $> 100,000$: 10% commission

The program should take the sales amount as input and output the commission.

Sample Input and Output Pair

Input	Output
Enter sales amount: 70000	Commission: BDT 2900 Tk Explanation: 1st 20000 => No commission = 0 Next 30000 => 5% commission = 1500 Next 20000 => 7% commission = 1400 Total = 1500 + 1400 = 2900
Enter sales amount: 10000	Commission: BDT 0 Tk
Enter sales amount: 1000000	Commission: BDT 95000 Tk

Submission Guideline:

1. Go to a drive except C drive.
2. Create a folder according to your roll number. Ex- 2305xxx
3. Open up the folder and create two files there. Ex- 2305xxx-1.c and 2305xxx-2.c.
4. Place all the code inside the two .c files.
5. Zip the folder and submit it in the moodle.