CSE 115 Bonus Assignments on if-else, switch-case

1. Write C Program to calculate the tax from salary using the following table. The formula for tax is: tax = (base tax) + (percentage of excess)*(salary – min. salary in the salary range). For e.g., if the salary is 32000, then tax=5400+(22/100)*(32000-30000) = 5400+440=5840.

Salary Range ($)	Base Tax ($)	Percentage of Excess
0.00–14,999.99	0.00	15
15,000.00–29,999.99	2,250.00	18
30,000.00–49,999.99	5,400.00	22
50,000.00–79,999.99	11,000.00	27
80,000.00–150,000.00	21,600.00	33

2. Write a C program that reads the semester no. of a student and print a comment about student based on the table below. Use if - else if - else.

Semester No.	Comment
0	Invalid Semester
1-3	Freshman
4-6	Sophomore
7-9	Junior
10-12	Senior
>12	You must graduate soon

3. Solve the above problem using switch-case.

4. Write a C program that reads the first letter of direction (North, South, East, West), current (x,y) coordinate, and advancement of a person and prints the new coordinate. For e.g., if the current coordinate of a person in X-Y plane is (2,3) and s/he advances 6 units towards North, then his/her new coordinate is (2,3+6)=(2,9). Sample input/output (bold ones are user inputs):

Enter current coordinate (x and y positions): **2 3**
Enter No. units towards direction: **6**
Enter Direction: **N**
New coordinate: (2,9)

5. Solve question#4 using switch-case.