NOTE: IT IS EXPECTED THAT EACH STUDENT WILL DO THEIR OWN WORK AND HAND IN HIS/HER OWN WORK. AGAIN: COPYING OTHER PEOPLES WORK WILL RESULT IN A GRADE OF NC.

Objective:

The purpose of this lab project is to expose you to functions and to reinforce your ability to write a program with selection.

Problem Specification:

The Siegel Internet Company   (address: 1 Pine Street Paterson NJ 07505, telephone number 201-777-777) has hired you to write a C++ program to calculate a customer's monthly internet bill. It should input customer's id #, which package the customer has purchased, and how many hours were used. It should then <u>create a bill that includes the input information and the total amount due.</u>

Requirements:

- Calculation:
  Package A: For $9.95 per month 10 hours of access are provided. Additional hours are $2.00 per hour.
  Package B: For $14.95 per month, 20 hours of access are provided. Additional hours are $1.00 per hour.
  Package C: For $19.95 per month unlimited access is provided.
- Data:

111111	a	8
222222	A	15
333333	B	20
444444	b	25
555555	C	10

- *Your input should be done in main.* Assume the package type is correct.
- Functions: There should be at two functions besides main. One function to calculate the bill and another function to display the output.
- Design your own bill. Make sure it is legible and readable with **appropriate headings and titles.**
- Comment thoroughly.

  Extra credit: The data should be entered within a while loop in main and the user should be asked if he/she wants to enter another customer. If the answer is yes, the program continues to enter the next customer and process it. If the answer is no, the program should exit from the loop and end the program.

Grading criteria:

1. Good Programming Practices: Proper spacing, comments, indentation, explanation to what the program does, and appearance of program. Program is consistent with good programming standards.	10	
2. Description of program is clear and meaningful.	5	
3. Appropriate and descriptive names are used for variables and function names. Both should follow the conventions established for the class.	10	
4. Flowchart or pseudocode for every function is included and is correct.	10	
5. Hierarchy (structure) chart is handed-in and is correct.	10	
6. Functions are properly used.	10	
7. If statements used properly	10	
8. Manipulators are properly used. Format to 2 decimal positions.	5	
9. All constants are defined correctly and properly.	5	
10. Proper headings and titles are used. Output is organized and legible and contains all the appropriate information.	10	
11. Program runs correctly and produces the intended results.	10	
12. Program is run for all the data.	5	

Submission Details: Email the following:

1. The C++ program
2. Structure chart
3. Flowchart or pseudo-code
4. Output.