

## POSTLAB #6 - CSE 1310

1. (15 points) Suppose that charges by a gas company are based on consumption according to the following table:

Gas Used	Rate
First 50 cubic meters	\$12.95 minimum cost
Next 100 cubic meters	\$0.095 per cubic meter
Next 350 cubic meters	\$0.0525 per cubic meter
Above 500 cubic meters	\$0.02125 per cubic meter

Write a program that computes the charges for a given amount of gas usage, call the program source file **gasBill.c**. Use **if** statements with compound logical statements or use nested **if** statements. The program should interact with the user and expect the user to enter two four digit numbers. The first number is the previous month's meter reading, the second is this month's meter reading. From these numbers calculate the total usage for the month. Keep in mind that this month's reading could be a number less than last month's reading (e.g., 9850, 0190 a difference of 340).

2. (4 points) Write a *switch* statement equivalent to the following sequence of *if - else* statements.

```
if (num == 0 || num == 1) printf("low");
    else if (num > 1 && num < 4) printf("medium");
        else if (num == 10) printf("high");
            else printf("not valid number");
```

3. (6 points) Write the following statements in C:

- If  $(a/b)$  is greater than 100 and  $a$  is less than  $b$ .
- If  $(a+b)$  is not equal to 200 and  $b$  is greater than or equal to 300.
- If  $(a+b)$  less than or equal to 2200 or  $(a-b)$  multiplied by 4 is equal to 500.

### Deliverables:

- E-mail the answers to all the questions to your lab instructor:
- Submit hardcopy of all the answers during the lab time.

### Sending E-Mail:

You can use Pine to send the e-mail. First, type answers to all questions in a file using 'vi' or 'pico'. Attach this file with the e-mail and make the "Subject of message:" POSTLAB #6. Remember to send a copy to yourself just in case your instructor does not receive your message.

