## Lab 4:

This is the same problem as problem 2 from chapter 6 in your book on page 321 ; except that the implementation requirements are different.

A hospital supply company wants to market a program to assist with the calculations of intravenous rates. Design and implement a program that interacts with the user as follows:

INTRAVENOUS RATE ASSISTANT

Enter the number of the problem you wish to solve. GIVE A MEDICAL ORDER IN
(1) ml/hr \& tubing drop factor
(2) 1 L for n hr
(3) $\mathrm{mg} / \mathrm{kg} / \mathrm{hr}$ \& concentration in $\mathrm{mg} / \mathrm{ml} \mathrm{ml} / \mathrm{hr}$
(4) units/hr \& concentration in units/ml ml / hr
(5) QUIT

```
Problem=> 1
Enter rate in ml/hr=> 150
Enter tubing's drop factor(drops/ml)=> 15
The drop rate per minute is 38.
Enter the number of the problem you wish to solve.
    GIVE A MEDICAL ORDER IN CALCULATE RATE IN
    (1) ml/hr & tubing drop factor drops / ml
    (2) 1 L for n hr ml / hr
    (3) mg/kg/hr & concentration in mg/ml ml / hr
    (4) units/hr & concentration in units/ml ml / hr
    (5) QUIT
Problem=> 2
Enter number of hours=> 8
The rate in milliliters per hour is 125.
Enter the number of the problem you wish to solve.
        GIVE A MEDICAL ORDER IN CALCULATE RATE IN
        (1) ml/hr & tubing drop factor drops / ml
        (2) 1 L for n hr ml / hr
        (3) mg/kg/hr & concentration in mg/ml ml / hr
        (4) units/hr & concentration in units/ml ml / hr
        (5) QUIT
Problem=> 3
```

```
Enter rate in mg/kg/hr=> 0.6
Enter patient weight in kg=> 70
Enter concentration in mg/ml=> 1
The rate in milliliters per hour is 42.
Enter the number of the problem you wish to solve.
    GIVE A MEDICAL ORDER IN CALCULATE RATE IN
    (1) ml/hr & tubing drop factor
    (2) 1 L for n hr ml / hr
    (3) mg/kg/hr & concentration in mg/ml ml / hr
    (4) units/hr & concentration in units/ml ml / hr
    (5) QUIT
Problem=> 4
Enter rate in units/hr=> 1000
Enter concentration in units/ml=> 25
The rate in milliliters per hour is 40.
Enter the number of the problem you wish to solve.
        GIVE A MEDICAL ORDER IN CALCULATE RATE IN
    (1) ml/hr & tubing drop factor drops / ml
    (2) 1 L for n hr ml / hr
    (3) mg/kg/hr & concentration in mg/ml ml / hr
    (4) units/hr & concentration in units/ml ml / hr
    (5) QUIT
Problem=> 5
```


## Coding Requirements:

There must be at least four functions (not including the main function) and there must be an example of each of the four following types of functions:
1.) Takes in parameters and returns a value
2.) Does not take in parameters and returns a value
3.) Takes in parameters and does not return a value
4.) Does not take in parameters and does not return a value

