EGN3211 Homework #2 - read all the way till “END OF REQUIREMENTS”

Use only concepts covered till chapter 4.

Submit one document. See EGN3211.Homework.Template for details.

Failure to demostrate the implementation of the program specifically the required input and output will result in serious deduction of points.

Assumptions

All inputs are expected to be valid. No need to validate input / check for invalid input.

Homework details

Text book : “C How to program 8th Edition”

Homework 2A: Problem # 4.9 (5 points)

Write a program that sums a sequence of integers. Assume that the first integer read with scanf specifies the number of values remaining to be entered. Your program should read only one value each time scanf is executed. A typical input sequence might be

5 100 200 300 400 500

Expected input & output

```
Please enter number of values to be entered :5
Please enter #1 :100
Please enter #2 :200
Please enter #3 :300
Please enter #4 :400
Please enter #5 :500
The total is 1500
```

Submit two runs of your program. First run should use the same sequence of input and produce the same output as the provided sample. Inputs for the second run is up to you.

Homework 2B: Problem # 4.14 (5 points)

Write a program that computes factorial for a desired number repeatedly until -1 is entered.

Expected input and output

```
Please enter number between 1 and 10 for factorial calculation (-1 to end) :4
factorial for 4 is 24

Please enter number between 1 and 10 for factorial calculation (-1 to end) :6
factorial for 6 is 720

Please enter number between 1 and 10 for factorial calculation (-1 to end) :8
factorial for 8 is 40320

Please enter number for factorial calculation (-1 to end) :-1
```

Submit 1 run of your program. It should have at least the inputs used above. In addition, at least two other inputs are required.

Homework 2C: Problem # 4.19 (10 points)

4.19 ***(Calculating Sales)*** An online retailer sells five different products whose retail prices are shown in the following table:

Product number	Retail price
1	$ 2.98
2	$ 4.50
3	$ 9.98
4	$ 4.49
5	$ 6.87

Write a program that reads a series of pairs of numbers as follows:

a) Product number
b) Quantity sold for one day

Your program should use a `switch` statement to help determine the retail price for each product. Your program should calculate and display the total retail value of all products sold last week.

Entering -1 for product number should indicate you are done entering the product numbers.

Sample input and output

```
Please enter the product number between 1 and 5.  -1 to end :1
Please enter quantity sold: 2
Please enter the product number between 1 and 5.  -1 to end :2
Please enter quantity sold: 3
Please enter the product number between 1 and 5.  -1 to end :3
Please enter quantity sold: 4
Please enter the product number between 1 and 5.  -1 to end :4
Please enter quantity sold: 5
Please enter the product number between 1 and 5.  -1 to end :5
Please enter quantity sold: 6
Please enter the product number between 1 and 5.  -1 to end :1
Please enter quantity sold: 3
Please enter the product number between 1 and 5.  -1 to end :2
Please enter quantity sold: 4
Please enter the product number between 1 and 5.  -1 to end :3
Please enter quantity sold: 5
Please enter the product number between 1 and 5.  -1 to end :4
Please enter quantity sold: 6
```

```
Please enter the product number between 1 and 5.  -1 to end :5
Please enter quantity sold: 7
Please enter the product number between 1 and 5.  -1 to end :-1
Product     Qty   Sales
Product 1 :   5    14.90
Product 2 :   7    31.50
Product 3 :   9    89.82
Product 4 :  11    49.39
Product 5 :  13    89.31

Total     :  274.92
```

Submit two runs of your program. First run should use the same sequence of input and produce the same output as the provided sample. Inputs for the second run is up to you.

END OF REQUIREMENTS