101 學年度 Assignment 2

Description

- 本作業必須以「Microsoft Visual Studio 2010 Professional」完成，利用其它軟體完成者將不予計分。
- 開啟「Microsoft Visual Studio 2010」，新增一個「專案」，以你的學號及作業的題號作為專案名稱。例如你的學號為 s123456 且要寫的作業為 Assignment 1 的第 3 題，則你的專題名稱為「s123456_Assignment1_3」。
- 你的專案目錄可能被儲存在"C:\Documents and Settings\Administrator\My Documents\Visual Studio 2010\Projects\s123456_Assignment1_3" in XP 作業系統 or "C:\Users\Administrator\Documents\Visual Studio 2010\Projects\s123456_Assignment1_3" in Windows 7 作業系統。
- 在完成程式撰寫後，完成存檔並關閉 Microsoft Visual Studio 2010 Professional。重複上述動作，進行下一題的作業。
- 當完成所有作業，回到「Projects」目錄，選擇所有要上傳的目錄，例如「s123456_Assignment1_1」、「s123456_Assignment1_2」、「s123456_Assignment1_3」等，並將滑鼠壓在這些目錄上並按滑鼠右鍵，以「傳送到」選項下的壓縮功能進行壓縮，壓縮後將得到此一作業的壓縮檔，例如 s123456_Assignment1_1.zip。之後將此一壓縮檔的檔名改為 s123456.zip，並上傳該檔至虛擬教室。
- 若繳交的內容(含檔案命名方式，目錄名稱)與指定的內容不合，將不被評分。

1. The yearly car registration fee can be found based on an automobile's model year and weight using the following table:

Model Year	Weight	Weight Class	Registration Fee
1990 or earlier	Less than 2700 lbs	1	26.50
	2700 to 3800 lbs	2	35.50
	More than 3800 lbs	3	56.50
1991 to 1999	Less than 2700 lbs	4	35.00
	2700 to 3800 lbs	5	45.50
	More than 3800 lbs	6	62.50
2000 or later	Less than 3500 lbs	7	49.50
	3500 or more lbs	8	62.50

   Using this information, write, compile, and run a C# program that accepts automobile's year and weight, and determines and displays its weight class and registration fee.

2. A machine purchased for $28,000 is depreciated at a rate of $4000 a year for 7 years. Write, compile, and run a C# program that computes and displays a depreciation table for 7 years. The table should have this form:

3. An arithmetic series is defined by the following:

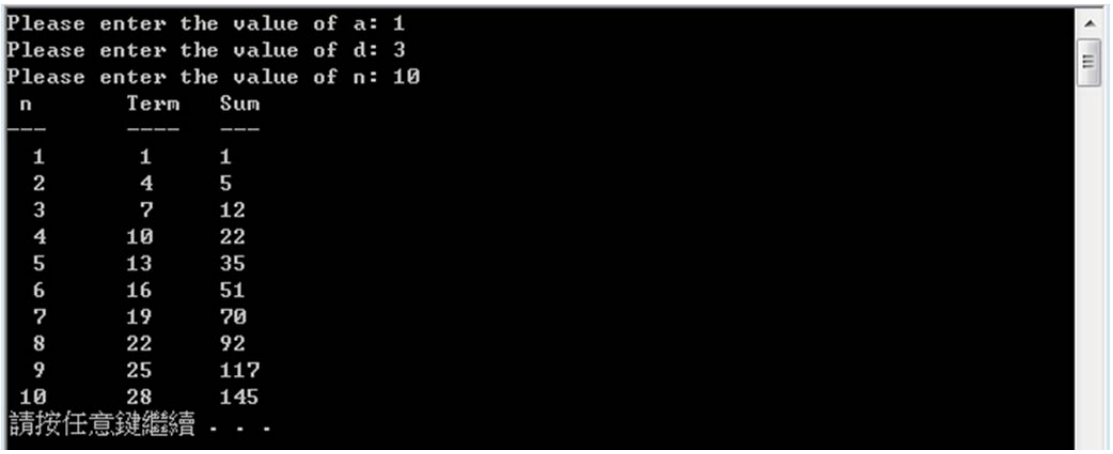
   $a + (a + d) + (a + 2d) + (a + 3d) + \cdots + [(a + (n - 1)d)]$

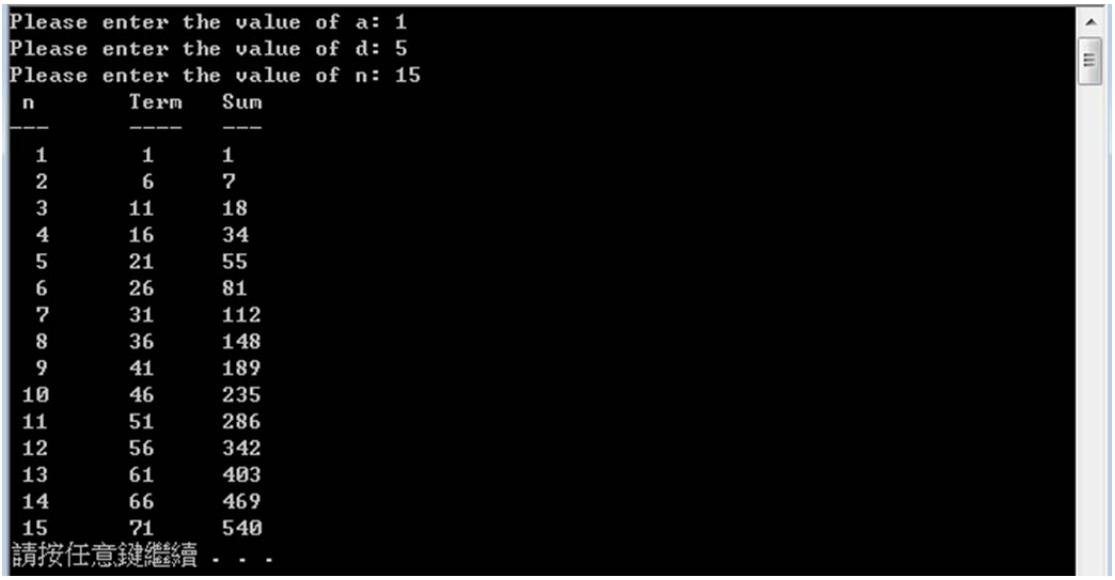
   a is the first term.

   d is the "common difference."

   n is the number of terms to be added.

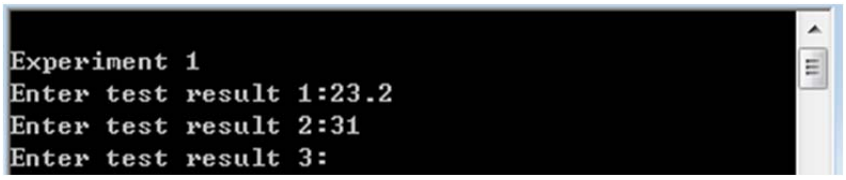
   Using this information, write a C# program that accepts the values of a, d, and n. In addition, this program uses a while loop to display each term and determine the sum of the arithmetic series. Make sure your program displays the value it has calculated.

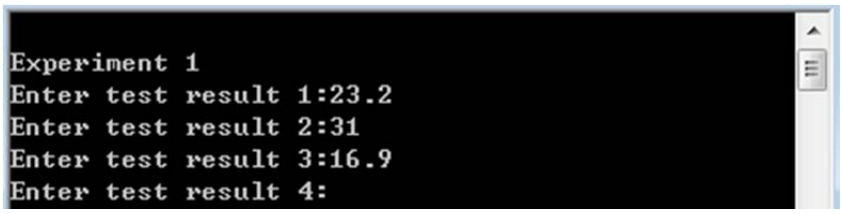




4. Four experiments are performed, and each experiment has six test results. The results for each experiment are given in the following list. Write, compile, and run a C# program using a nested loop to compute and display the average of the test results for each experiment.

1st experiment results:	23.2	31	16.9	27.5	25.4	28.6
2nd experiment results:	34.8	45.2	27.9	36.8	33.4	39.4
3rd experiment results:	19.4	16.8	10.2	20.8	18.9	13.4
4th experiment results:	36.9	39.5	49.2	45.1	42.7	50.6





…