Description

This exam consists of two questions:  
Only use the text box (optional - relevant comments to the professor) do not attempt to answer any question in the text boxes.

m\_question1(KwangjinBaek)

m\_question2(KwangjinBaek)

**Question 1 [**10 Points]: mid\_term\_flowchart(KwangjinBaek)

* Draw the Flowchart ONLY the program is NOT required.
* Upload your work as an attachment using the "Add File" section  *found* *on the question*.
* **Draw a flowchart to design the following  application:**
* The application ~~accepts two numbers~~ and ~~two string~~. The string information is ~~first and last name~~, they ~~cannot be empty~~. The numeric information entered is checked for numeric information and the information is not empty. The numeric information needs to be ~~between 500 and 1000~~, if not  then ask the user to ~~reenter that information, showing an appropriate message and what the user typed in~~.
* Any ~~repeated input must also be checked~~.   
  After all information is validated, ~~add both numbers~~ then ~~display the numbers that were added~~, the users name and the result.  
  **This must be readable for marking.**

**Question 2**[30 Points]:

* This question MUST be done in C# - Visual Studio
* When completed zip  ENTIRE project folder (which must include the program.cs file)
* Win Zip Only (No Win RAR files will be accepted)
* Upload the zipped folder as an attachment using the "Add File" section *found on the question*.

**To attempt this exam:**

**Grading and Time:**

* The total time to attempt this exam is 120 minutes (2 hours) with a grace period of 30 minutes for submitting.
* This exam is worth a total of 40 points
* As shown above the points assigned to each question are indicated next to the question
* **Be sure** to click the "submit option" when finished - to ensure your work is sent for grading

Quiz Details

**Note:** You cannot move backwards once you leave a page.

*Question:**Read the entire question before attempting:*

**>Write a C# console application project to do the following:**

* 1. You must use proper error and exception handling (try, catch) in the application. [5 marks]
  2. Accept the users first and last name store in two SEPARATE variables. [2 marks]
  3. Accept two numbers:
     1. validate that the user has entered numbers for each input. [3 marks]
     2. For invalid numbers ask the user to re-enter the number [1 marks]
     3. Prompt and Error messages to the users have to be explanatory with no spelling errors[2 marks]
     4. ~~If the user enters a number greater than 500 throw an exception, display a message that numbers should be less than 500. [3 marks]~~
  4. Give the user the option to do any **one** of the following calculations (i.e prompt for user input):
* add both numbers
* multiply both numbers
* divide the second number by the first.
* subtract the first number from the second.

**>You must use an if-Else-Elseif to evaluate the user selection. [3 marks]**

* 1. After the result is completed:
     1. if the result is greater than 50 multiply the result by two and subtract 4.
     2. If the result is less than 50 but greater than 10 multiply the result by 7 and add 2.
     3. If the result is less than 10 do nothing.

**>You must use a switch statement to get full marks. [5 marks]**

* 1. ~~Display the users first and last name along with the calculation result on the screen in this format> “Hello <first name> <last name> your answer is <answer>~~**~~[2 marks]~~**
  2. The user should have the option to repeat the process of entering two numbers until they enter the word “END” to exit the application. [2 marks]

**>The program must run at least one time – based on this You must correctly choose either the do- while or the while loop to satisfy this requirement. [2 marks].**