***Assembly Language 2014***

***Assignment #3***

***General notes:***

1. Assignment deadline is Thursday 25th December 2014 11:59 PM.
2. Make a separate .asm file for each problem.
3. Make sure your code is running, we **won’t fix** any syntax errors.
4. You MUST use procedures.
5. You are **not allowed** to use the MASM conditional control flow directives (.if, .while, .repeat ,…. etc.) mentioned in section 6.7.

Problems:

1. **Two Largest Number**

Create a program that that reads 10 integers and finds the two largest value among input integers.

1. **Boolean Calculator**

Create a program that functions as a simple Boolean calculator for 32-bit integers.

You should display a menu that asks the user to make a selection from the following list:  
1. x AND y  
2. x OR y  
3. NOT x  
4. x XOR y  
5. Exit program

When the user makes a choice, ask him to enter values for x and y.

You should output the name of procedure done and the result.

Also the menu should be displayed again so the user can make more than one choice.

1. **Test Score Evaluation**

Write a program that asks the user to enter an integer test score between 0 and 100 and print the appropriate letter grade. The program should ask the user to enter the number of grades he wants to check at the beginning.

|  |  |
| --- | --- |
| **Score Range** | **Letter Grade** |
| 90 to 100 | A |
| 80 to 89 | B |
| 70 to 79 | C |
| 60 to 69 | D |
| 0 to 59 | F |

Sample:

Enter number of students: 2

Enter Grade: 98

Letter Grade: A

Enter Grade: 68

Letter Grade: D

1. **Test Score Evaluation with range checking**

Modify your previous program to perform range checking on the user’s input: Display an error message if the test score is less than 0 or greater than 100.