

**Assignment #1**  
**Visual Studio Basics**

## Assignment

Download the provided Visual Studio project and unzip it somewhere on the machine where you will be running Visual Studio. Enter the unzipped directory and open the "Project.sln" file in Visual Studio to load the project. This will load the Assignment\_1.asm file which should contain 10 breakpoints on lines 34, 38, 42, 46, 50, 54, 68, 72, 96, and 218. From here you will need to run the Visual Studio debugger as shown in class to answer the questions below. However, before completing the questions below – make sure you read the Assignment Guidelines on page #3.

1) When Visual Studio encounters the breakpoint on line **34**, what is the value of:

- a. EDI (in Hexadecimal) = \_\_\_\_\_
- b. EIP (in Hexadecimal) = \_\_\_\_\_

2) When Visual Studio encounters the breakpoint on line **38**, what is the value of:

- a. EAX (in Hexadecimal) = \_\_\_\_\_
- b. EDI (in Hexadecimal) = \_\_\_\_\_

3) When Visual Studio encounters the breakpoint on line **42**, what is the value of:

- a. EBX (in Hexadecimal) = \_\_\_\_\_
- b. EDI (in Hexadecimal) = \_\_\_\_\_

4) When Visual Studio encounters the breakpoint on line **46**, what is the value of:

- a. EBX (in Hexadecimal) = \_\_\_\_\_
- b. EDI (in Hexadecimal) = \_\_\_\_\_

5) When Visual Studio encounters the breakpoint on line **50**, what is the value of:

a. ECX (in Hexadecimal) = \_\_\_\_\_

b. EDX (in Hexadecimal) = \_\_\_\_\_

6) When Visual Studio encounters the breakpoint on line **54**, what is the value of:

a. AX (in Hexadecimal) = \_\_\_\_\_

b. DX (in Hexadecimal) = \_\_\_\_\_

7) When Visual Studio encounters the breakpoint on line **68**, what is the value of:

a. EAX (in Hexadecimal) = \_\_\_\_\_

b. DX (in Decimal) = \_\_\_\_\_

8) When Visual Studio encounters the breakpoint on line **72**, what is the value of:

a. AX (in Decimal) = \_\_\_\_\_

b. DX (in Decimal) = \_\_\_\_\_

9) When Visual Studio encounters the breakpoint on line **96**, what is the value of:

a. EAX (in Hexadecimal) = \_\_\_\_\_

b. EIP (in Hexadecimal) = \_\_\_\_\_

10) When Visual Studio encounters the breakpoint on line **218**, what is the value of:

a. AX (in Decimal) = \_\_\_\_\_

b. DX (in Decimal) = \_\_\_\_\_

## Assignment Guidelines

- 1) Do not add, remove, or alter the Assignment\_1.asm source code file in any way. Doing so will result in you getting some answers wrong.
- 2) Hexadecimal results should be padded with 0's to the correct length for the register, if necessary. For example, if the hexadecimal value for AH is 8, you should write it as 08 to account for the fact that AH is 1 byte in length.
- 3) Decimal values do not need to be padded with 0's.
- 4) Double check the breakpoint line you are currently on before answering each question – there is no guarantee these will be answered in the order stated above.

## What to turn in to BlackBoard

A scanned copy or picture of your completed assignment. Keep in mind there are 10 questions with a part 'a' and 'b' each. Make sure your submission includes answers to all 10 questions, deadlines will **not** be extended and credit will not be given if you fail to turn in some portion of the assignment.