Leonel Garay
Project 2 - Using the Debugger (Lab)

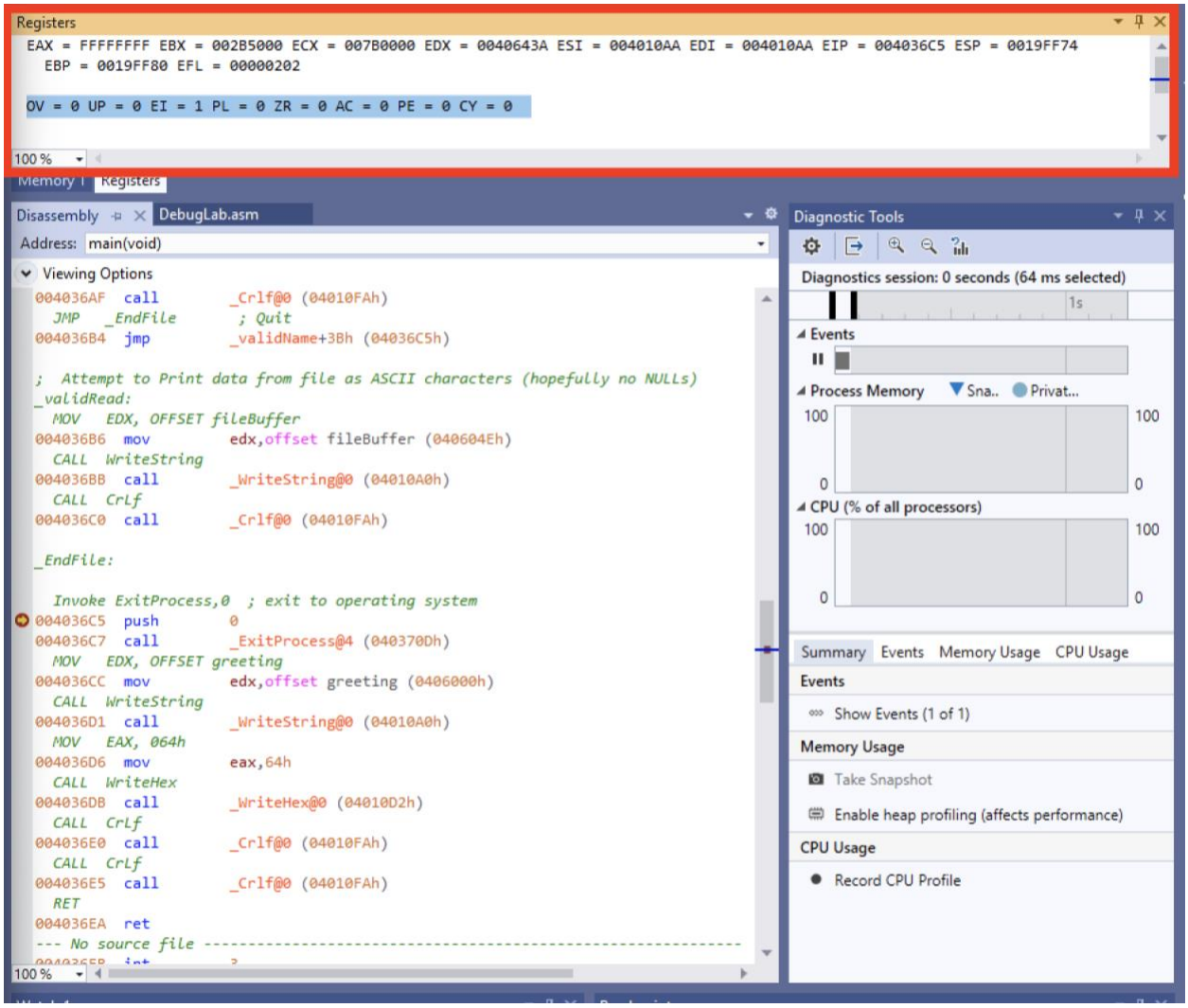
Part 1 - Questions

1. What is the current value (in Hex) of the EAX Register?

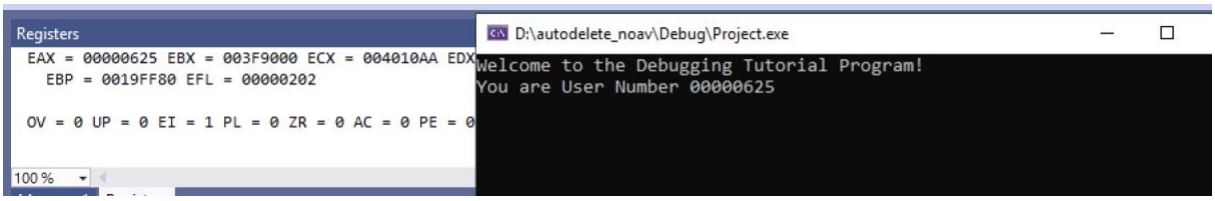
   EAX = FFFFFFFF

2. What is the current state (Set/Clear) of the following flags: Carry, Overflow, Zero, Sign?

   Carry = 0 | Overflow = 0 | Zero = 0 | Sign = 0 | All clear



Part 2 - Navigating Code and Procedures



Part 3 - Disassembly View

1. What is the memory address (in the code segment) of the instruction located at the _validName code label? Note that this question is not asking about the address of the JNE _validName instruction, but the actual code label (defined as _validName:).

   040368Ah

2. What instruction (with operands, if any) is stored at the code segment address from Question 1 above? addition to writing the instruction (with operands, if any), please circle this line on the screenshot attached to this part in your report, including the address from Question 1.

   mov eax, dword ptr

```
00403674  cmp         eax,0FFFFFFFFh
  JNE   _validName    ; Filename Checks Out!
00403677  jne         _validName (040368Ah)
  MOV   EDX, OFFSET fileNameError   ; Print Filename Error!
00403679  mov         edx,offset fileNameError (040643Ah)
  CALL  WriteString    ; Notify User
0040367E  call        _WriteString@0 (04010A0h)
  CALL  CrLf
00403683  call        _Crlf@0 (04010FAh)
  JMP   _EndFile       ; Quit
00403688  jmp         _validName+3Bh (04036C5h)

;  Attempt to Read Input File to Memory
_validName:
0040368A  mov         eax,dword ptr [fileHandle (040604Ah)]
```

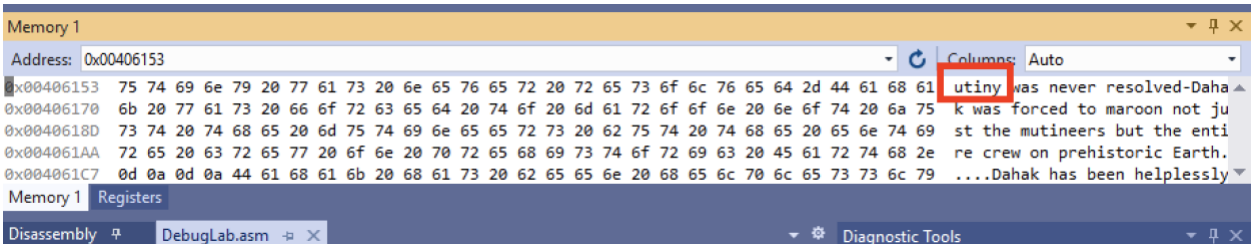
3. What is the significance of the relationship between the value in EIP (in the Registers window) and the leftmost value on any given line?

   The EIP is pointing to the first byte of the next instruction to be executed which is the leftmost of any given line.

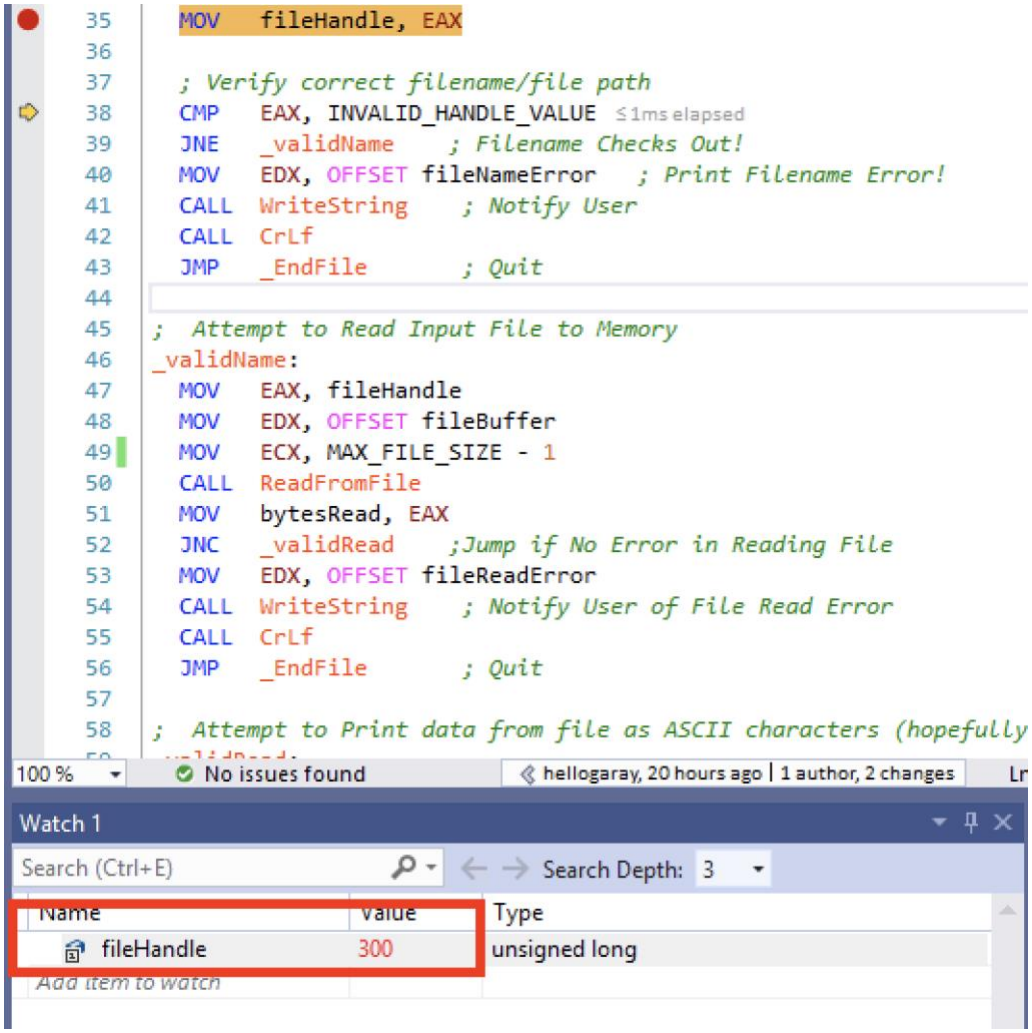
Part 4 - Spelunking through Memory

1. Let n = (the last three digits of your OSU ID number). What is the (n+1)st byte (index n) of TestText.txt, interpreted as an ASCII character?

   257th = u in mutiny.



Part 5 - Keeping Careful Watch

1. What is the unsigned value of fileHandle after opening the TestText.txt file?

   300