

Part 1: Initial Setup

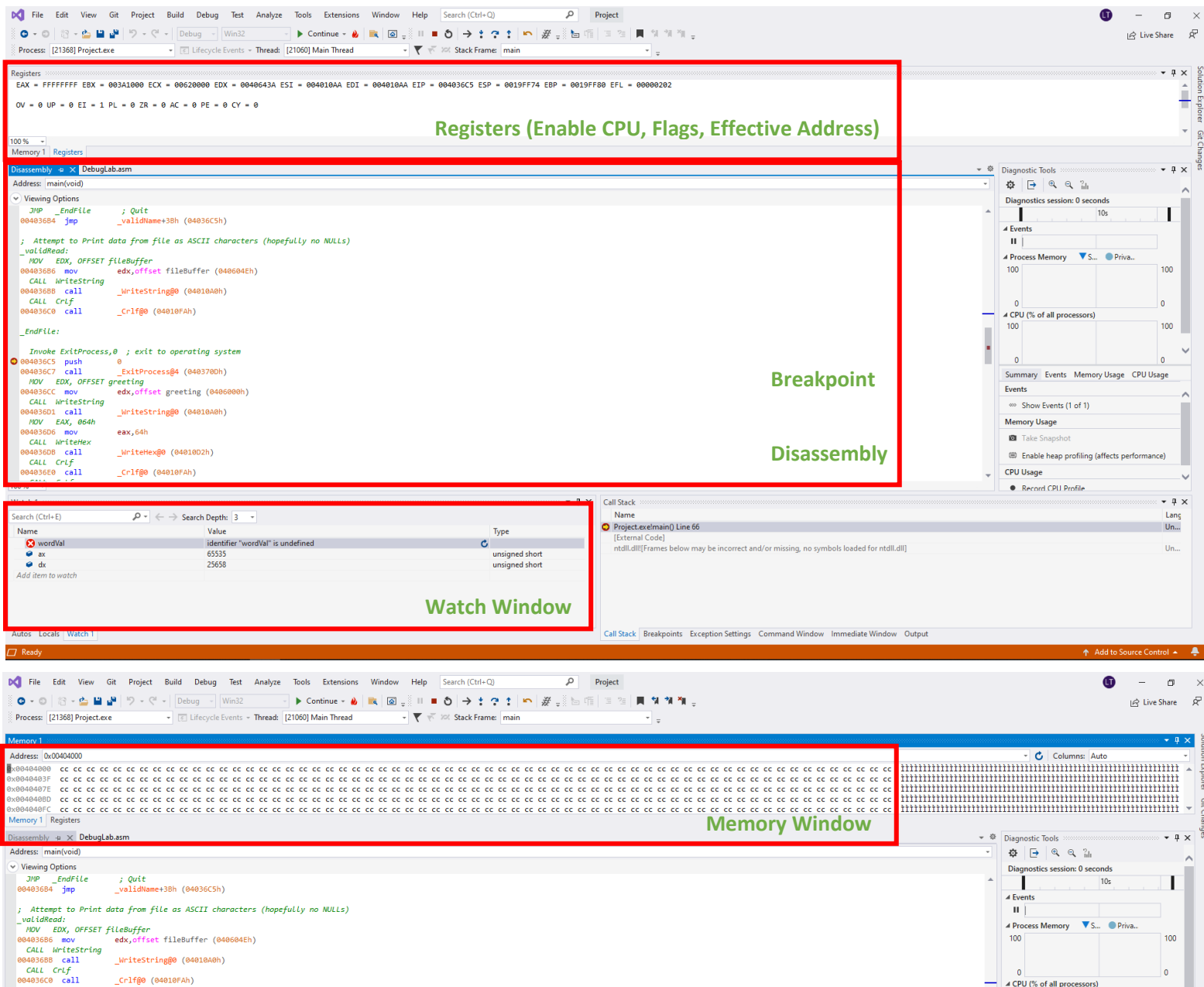


Figure 1: Screenshots of IDE state

Question Part 1.1:

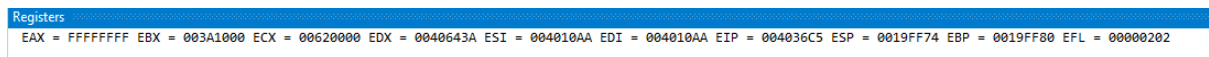


Figure 1.1: Current value of EAX

Current value of EAX = FFFFFFFF

Question Part 1.2:

OV = 0 UP = 0 EI = 1 PL = 0 ZR = 0 AC = 0 PE = 0 CY = 0

Carry Flag (CY): Clear

Overflow Flag (OV): Clear

Zero Flag (ZR): Clear

Sign Flag (PL): Clear

Question Part 2:

EAX = 00000419

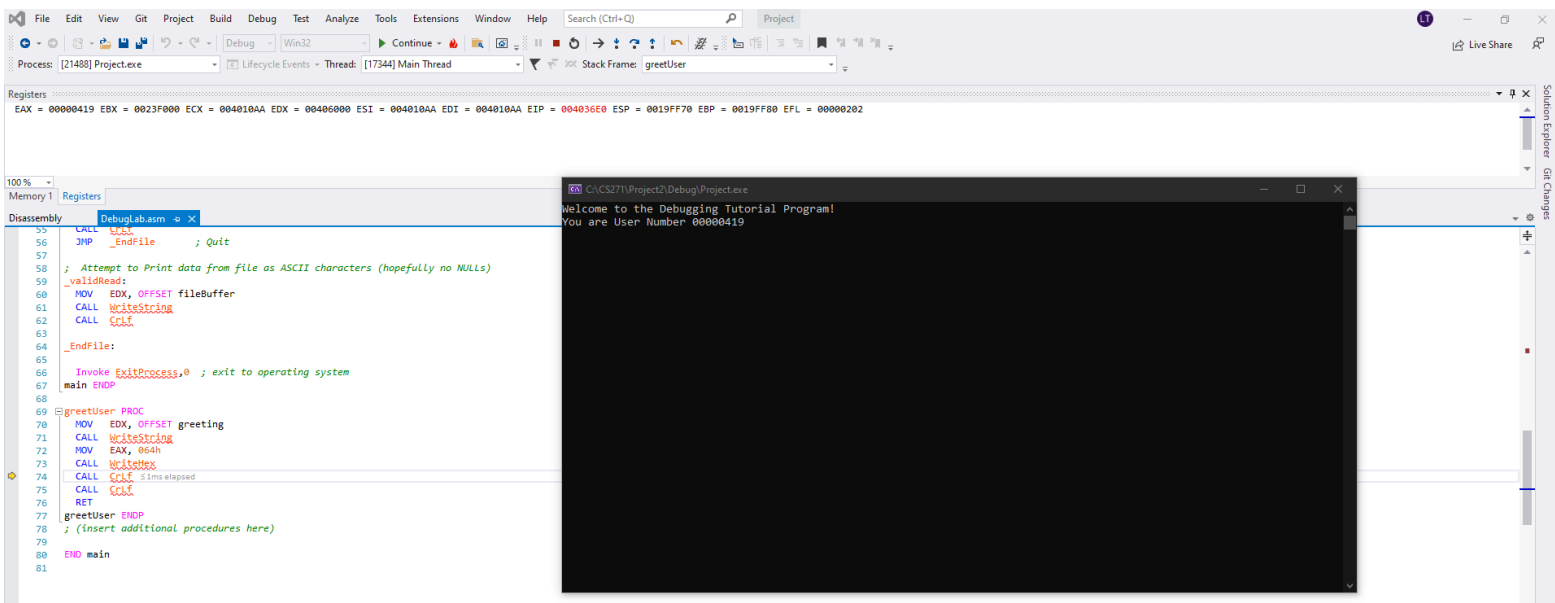


Figure 2: Screenshots of Changing last 3 digits of EAX to OSU ID

Question Part 3.1:

MOV EDX, OFFSET fileNameError

Question Part 3.2:

00403679

Question Part 3.2:

EIP stores the address of the next instruction, thus the value in EIP will change according to the address of the next execution line.



Figure 3.1: Instruction at the validName code label

Question Part 4.1:

Last 3 digits of OSU ID = 419

Enter: &fileBuffer+420 (equivalent address: 0x004061F6)

ASCII character: s

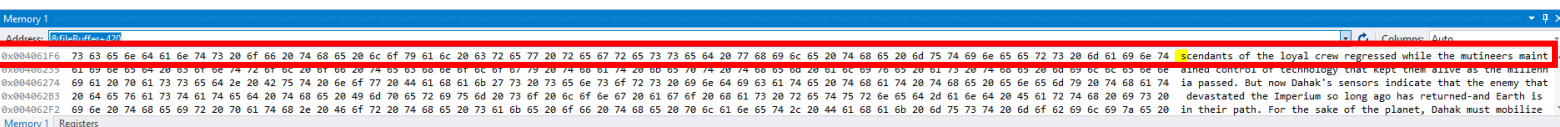


Figure 4.1: Address of (n+1)th byte

Question Part 5:

Before execution of the line (MOV fileHandle, EAX): 0

After execution of the line: 256

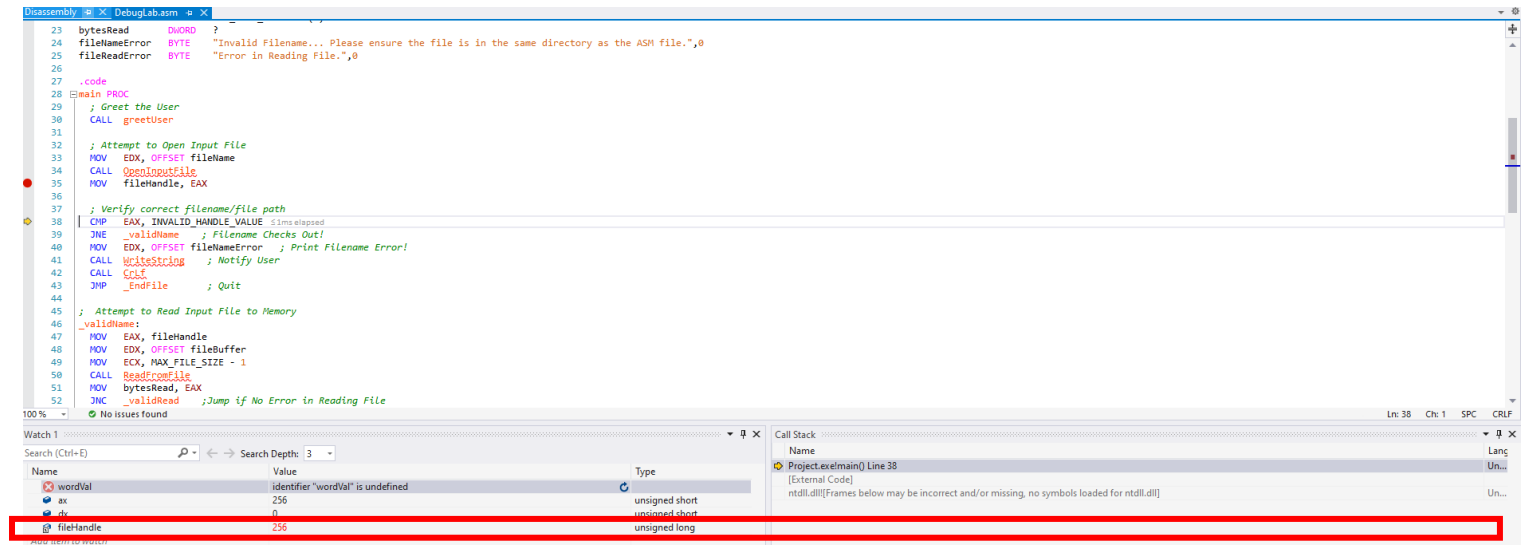


Figure 5: Value of fileHandle