Assembly Language and System Programming Lab7 Report

Group: 2

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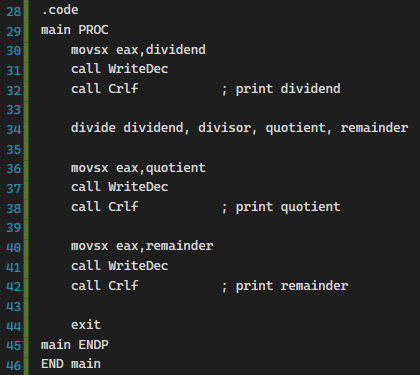
Student ID: 110502531、110502567

**Objective:**

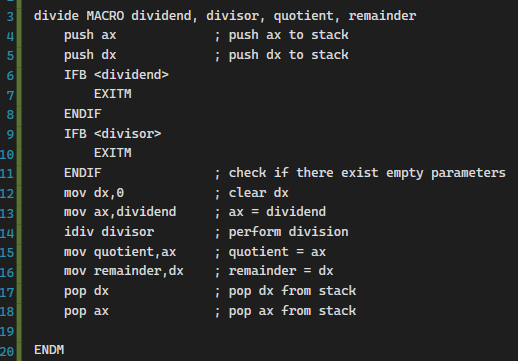
Add a MACRO named divide to the program. After the program calls divide, four parameters are passed in. Perform a division operation and return the quotient and remainder remaining.

**main PROC:**

Line 30-32, 36-38, 40-42 is printing process, whereas line 34 is the usage of macro ‘divide’.

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**MACRO:**

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**Line 4-5, 17-18:**

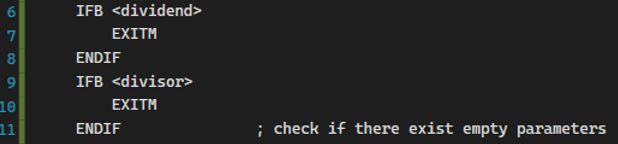
We use the stack to store the original value of the registers, in case of the loss of data.

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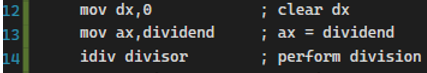
**Line 6-11:**

Check if the arguments are blank.

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**Line 12-14:**

Firstly, we clear dx in which the remainder is stored. Then we move dividend to ***ax***. Lastly, we perform the division, which will divide ***ax*** by its operand, in this case, divisor. And then it will store the quotient in ***ax***, the remainder in ***dx***.

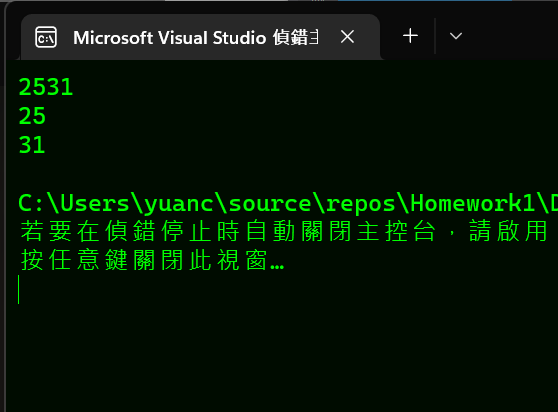
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**Line 15-16:**

Store the result in memory.

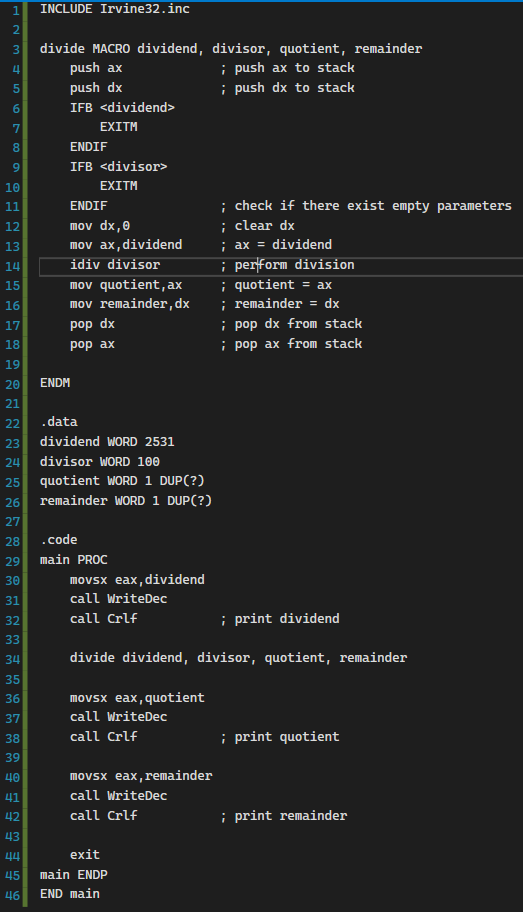


**Result:**

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**Review:**

**Full code:**

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