

Assembly and Machine Language

Homework 1

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Your task is to apply a sequence of mathematical operations on two input numbers. Your program must read **two integers** from the standard input and print the final result. The mathematical operations are **unique** to each student. You are able to access your specific sequence using the link below:

[Your mathematical sequence](#)

Furthermore, your assembly program must comply with the following set of limits:

- You can only use the commands you learned so far in the class. You cannot use the MUL or IMUL operations or jump and loop assembly commands.
- You have to use the **read_int** and **print_int** function from the textbook for I/O.
- You can only use the registers EAX, EBX, ECX, EDX, ESI, and EDI, and you are not allowed to use the memory (data segment) for storing data.
- Your assembly code must not be similar to other students' codes.

Please notice that your codes will be automatically checked for different sorts of cheating including but not limited to the similarity check. In the case of cheating the student will receive a **negative point**.

Please upload only the “.asm” file on the **course.kntu.ac.ir** website.

Example:

If your input numbers are 10 and 20 and your sequence is $((\text{first_number} - 100) * 8) + (3 * \text{second_number})$, then the output number will be $-660 = (((10 - 100) * 8) + (3 * 20))$.