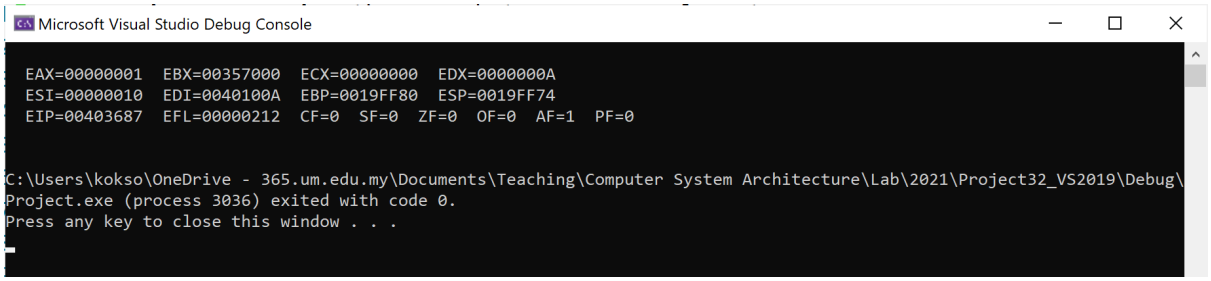
Lab Assignment

1. Write a program with indexed addressing that calculates the sum of all the gaps between array elements. The array elements are word type, sequenced in non-decreasing order. Use the value array {0,2,5,9,10}. These values has a gaps of 2,3,4, and 1 which the total of 10.

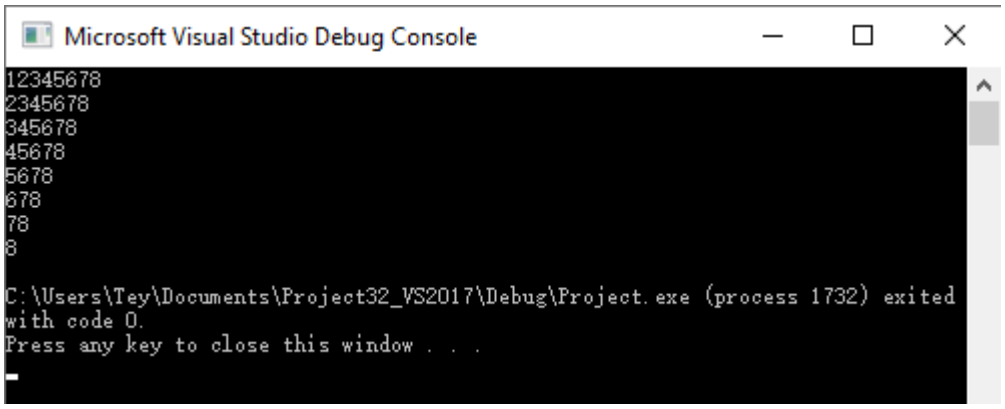
Example Output:



You can also show it in the debug window.

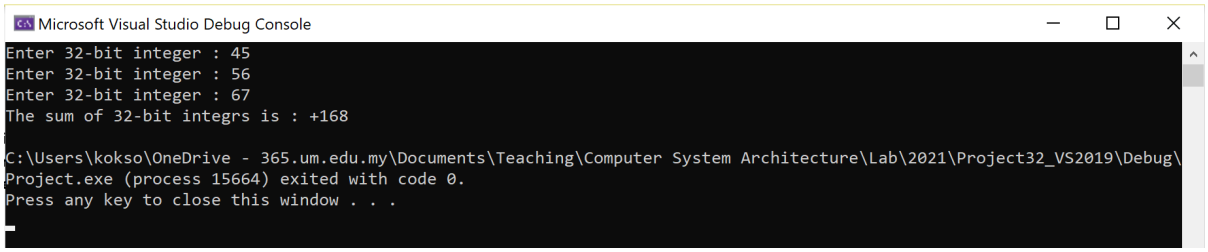
2. Write an assembly code to generate a sequence of number when a number is initialized. Follow the below instruction:
    a. Initialize a number which is 8.
    b. Use all available register to perform an instruction that can generate a sequence of number 1,2,3,4,5,6,7,8,. The output should be like this:
    1 2 3 4 5 6 7 8
    2 3 4 5 6 7 8
    3 4 5 6 7 8
    4 5 6 7 8
    5 6 7 8
    6 7 8
    7 8
    8

Example Output:



3. Write a program that prompts the user for three 32-bit integers stores them in an array, calculates the sum of the array, and displays the sum on the screen.

Example Output:



4. Create a procedure that receives an integer value between 0 and 100. Then, display a single capital letter on the screen. The letter returned by the procedure should be according to the following ranges.
   90 to 100 ---- A
   80 to 89 ------ B
   70 to 79 ------ C
   60 to 69 ------ D
   0 to 59 -------- F

Example Output: