

Lab 06

Tasks

1. Example 3.3 (a) and 3.3 (b)

The primary difference between the two strategies is the termination condition for the outer loop:

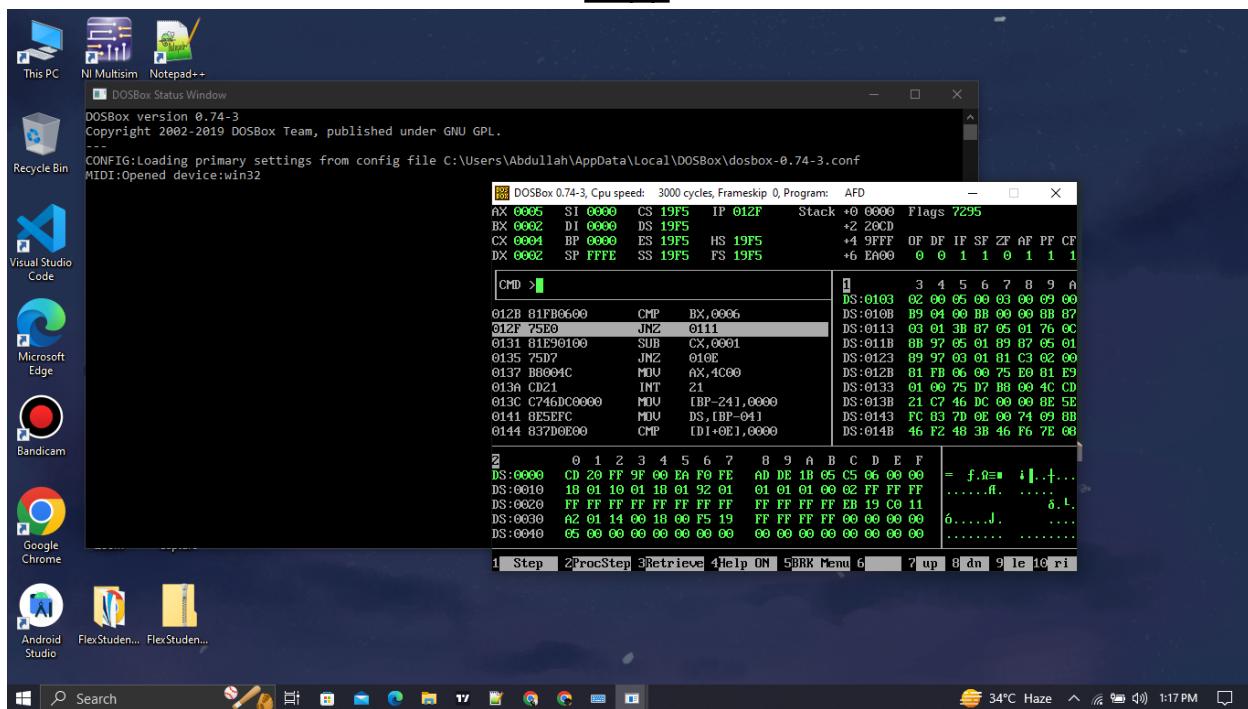
3.3(a): Predetermined number of passes (4 in this example).

3.3(b): The outer loop is executed until no swaps are performed in an entire pass.

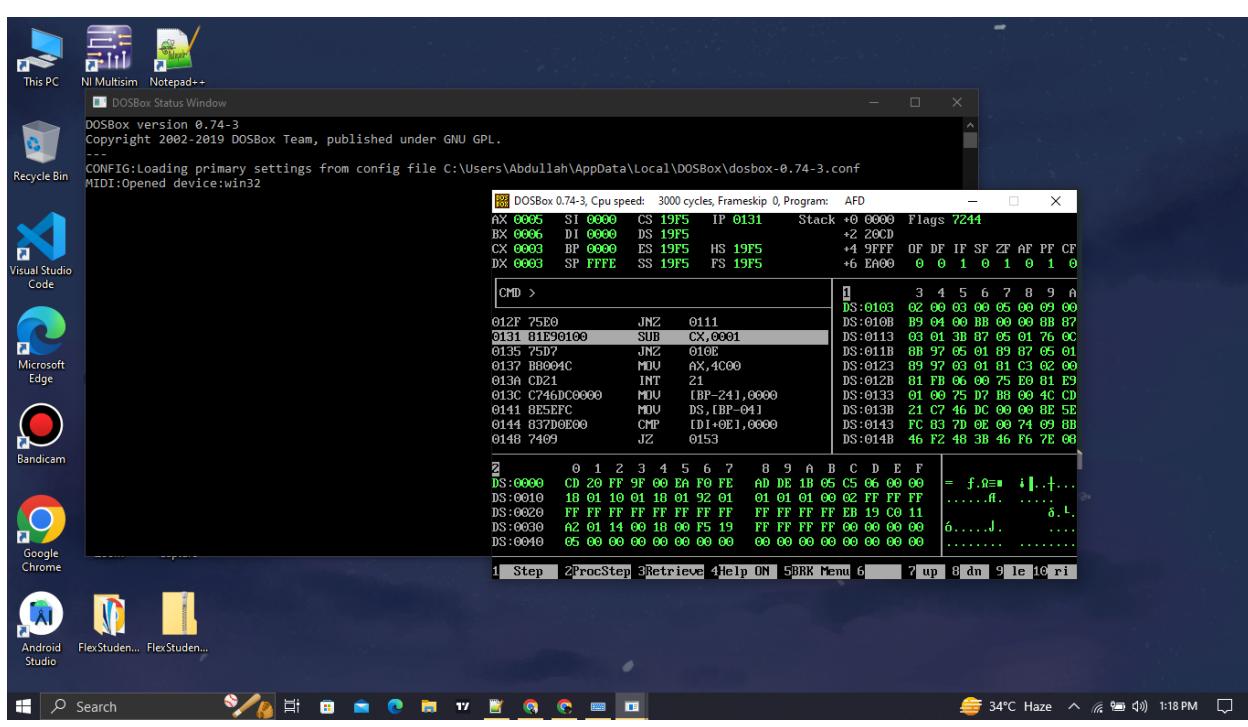
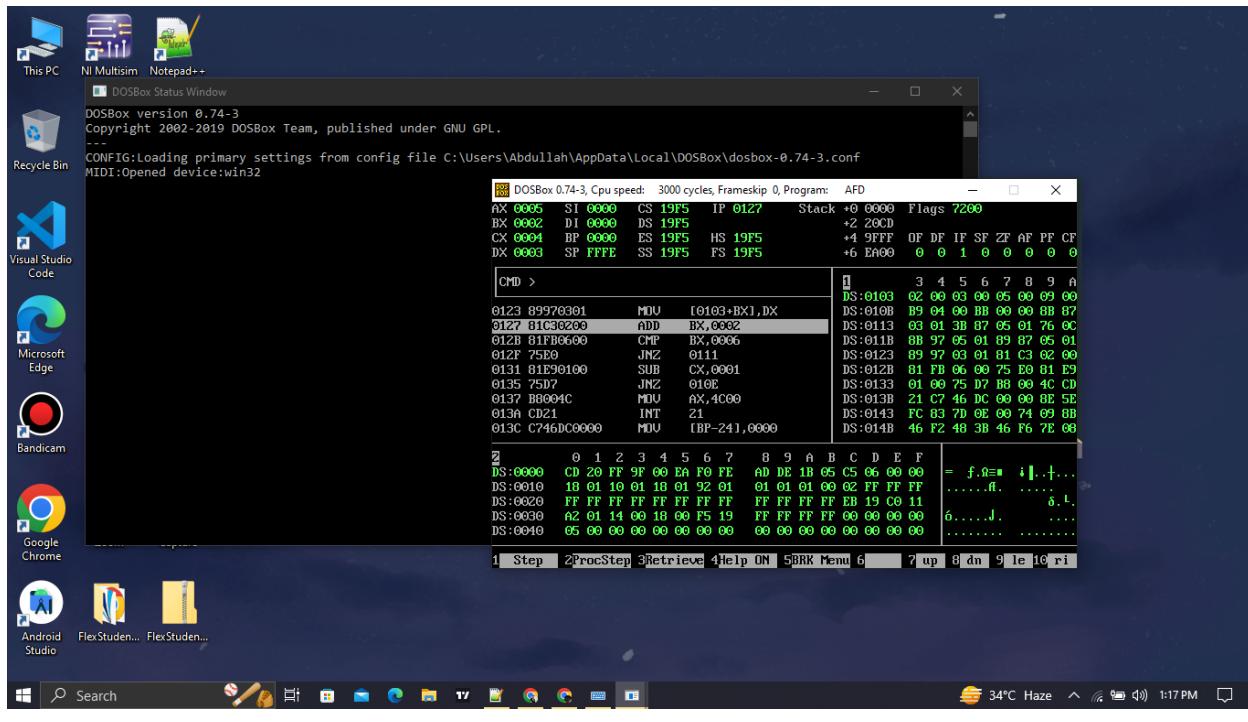
In summary, the first method (3.3(a)) always executes a set number of passes, whereas the second method (3.3(b)) decides the number of passes dynamically based on whether any swaps are performed. The second technique may be more efficient since it may end early if the array is already sorted before the maximum number of passes.

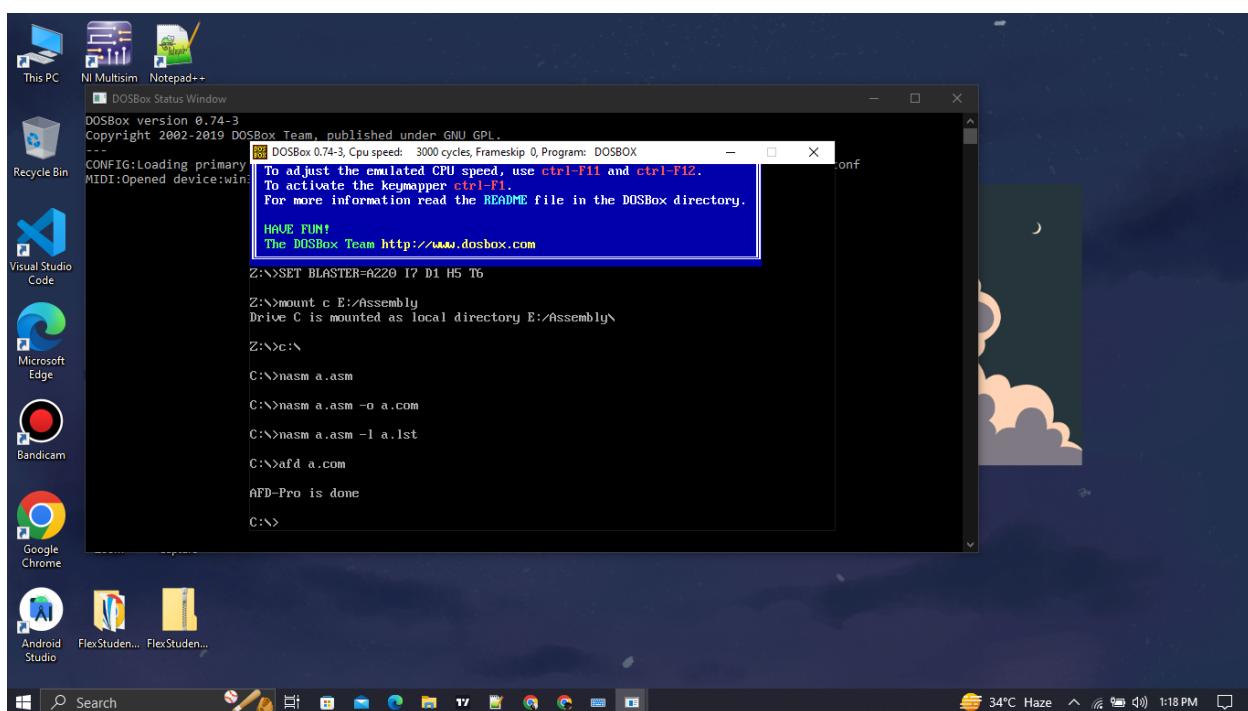
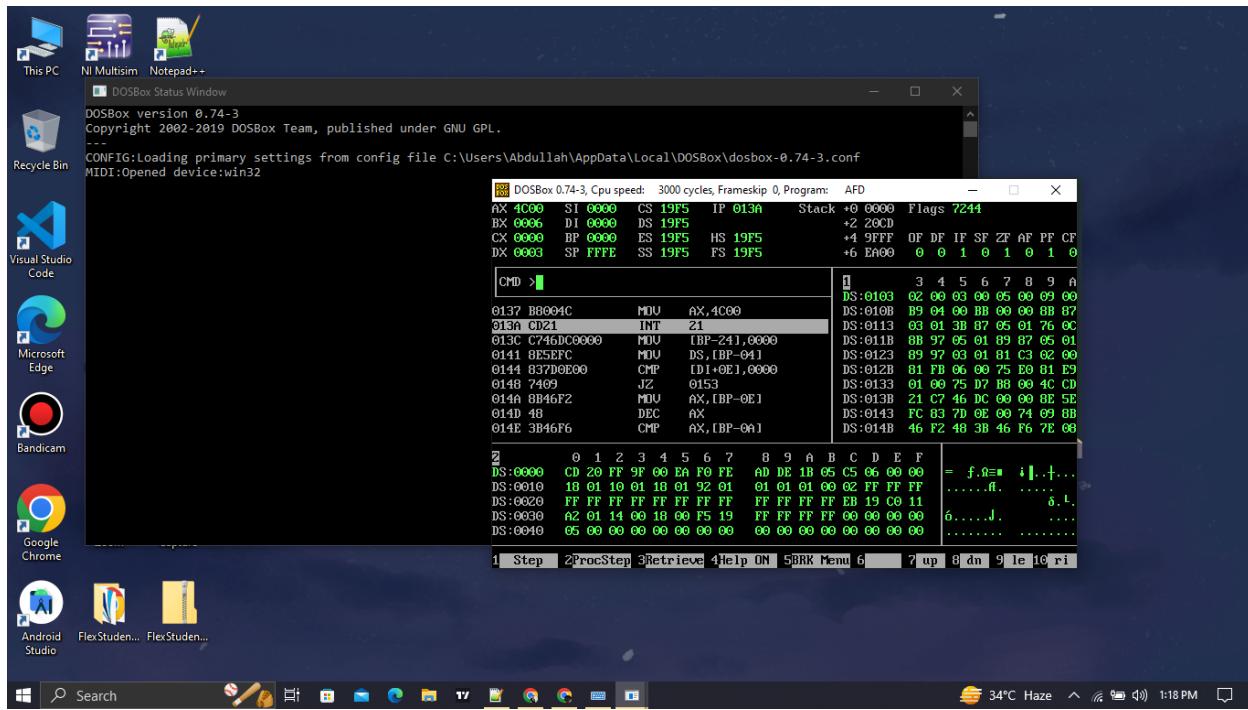
Screenshots:

3.3(a):



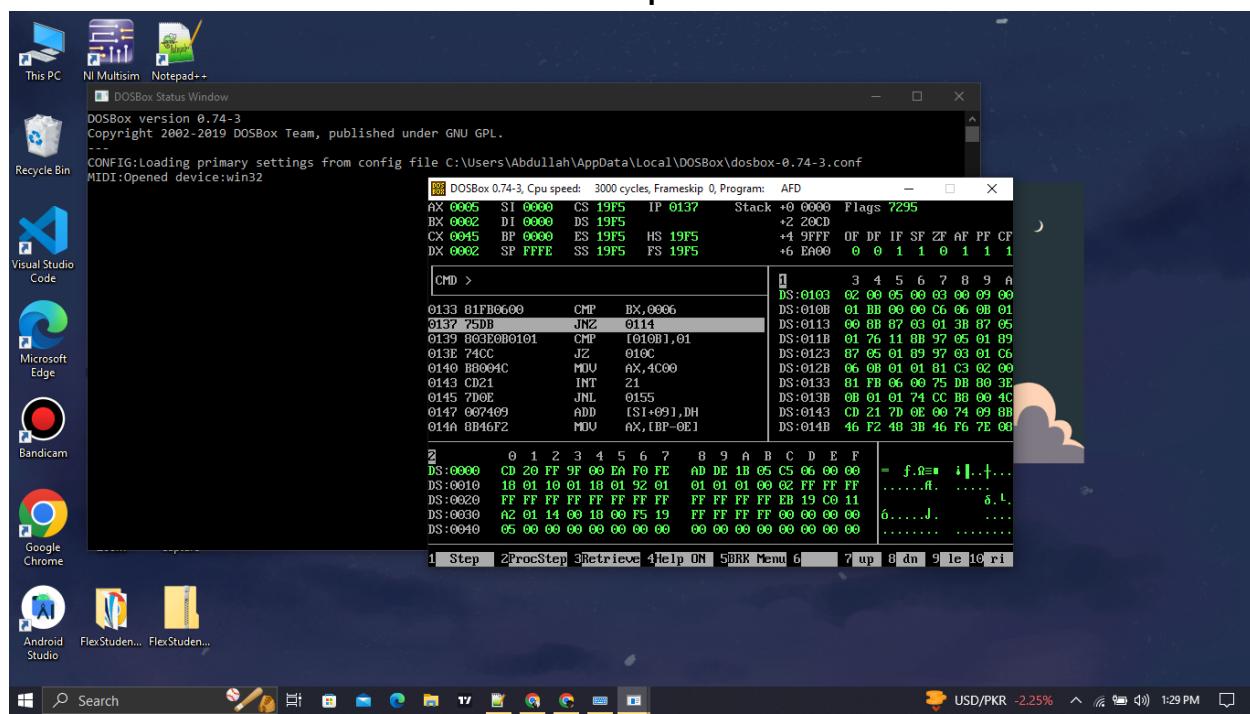
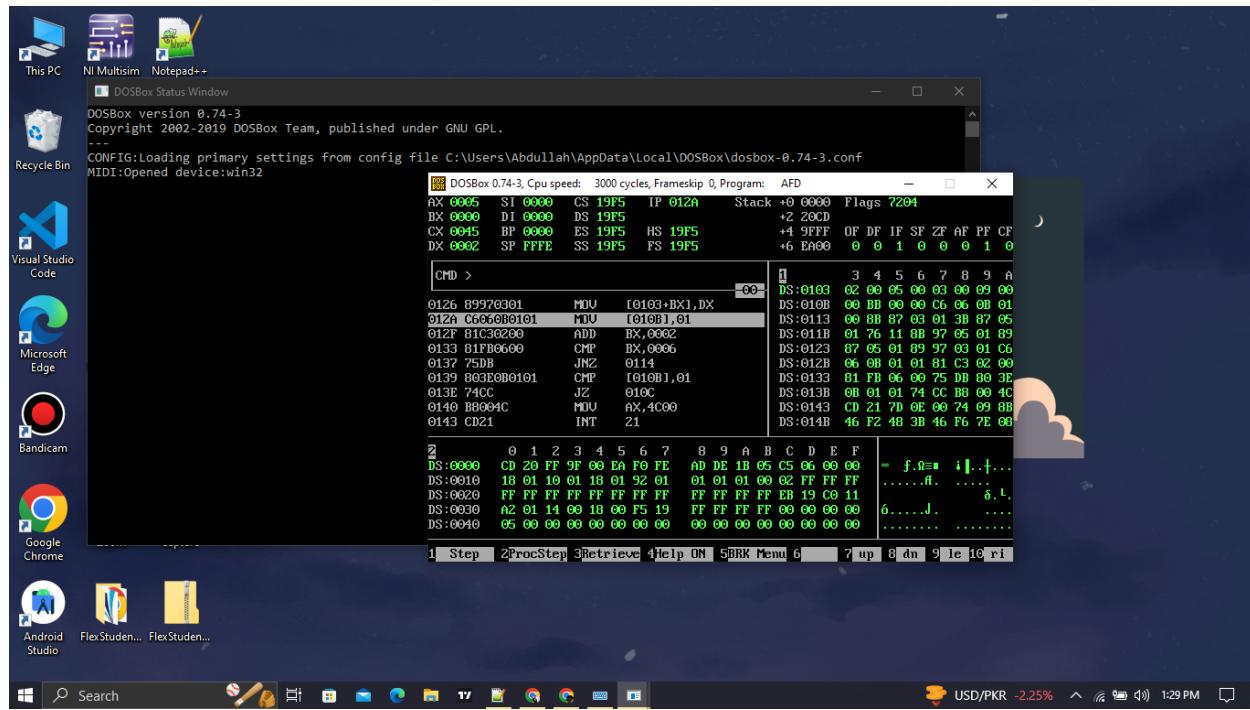
5 swap 2 and SF raised

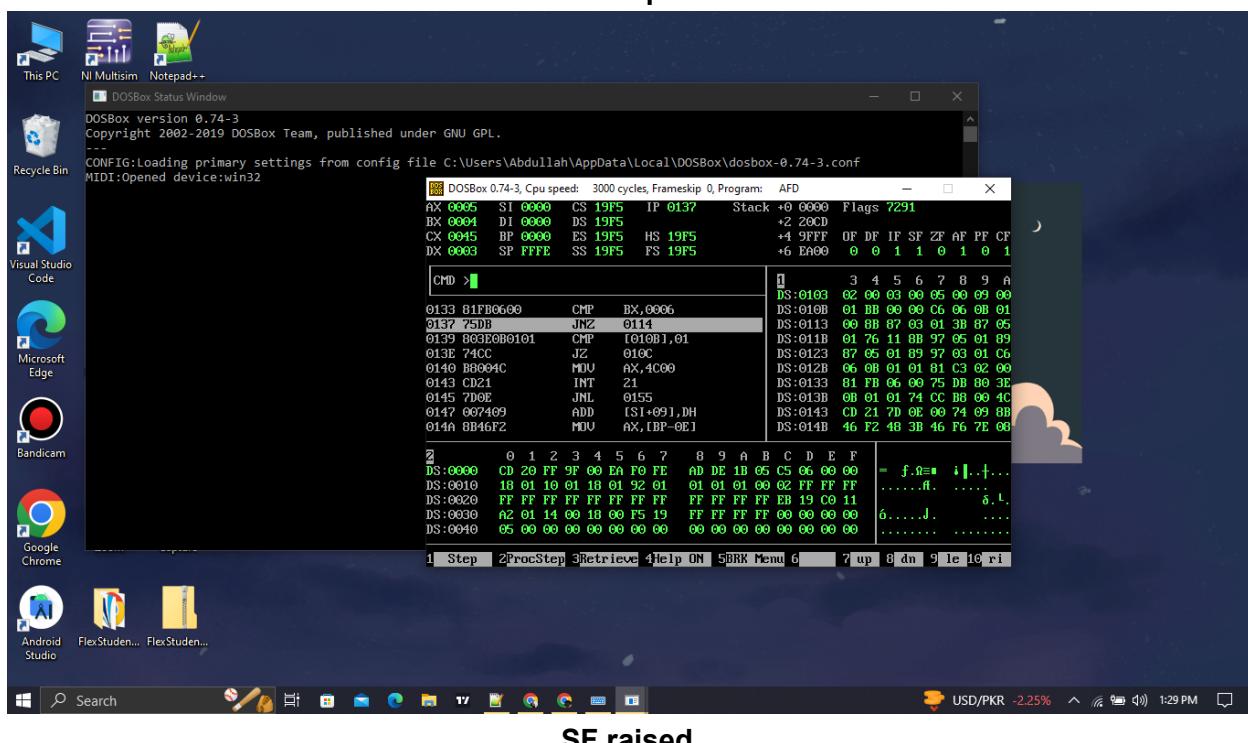
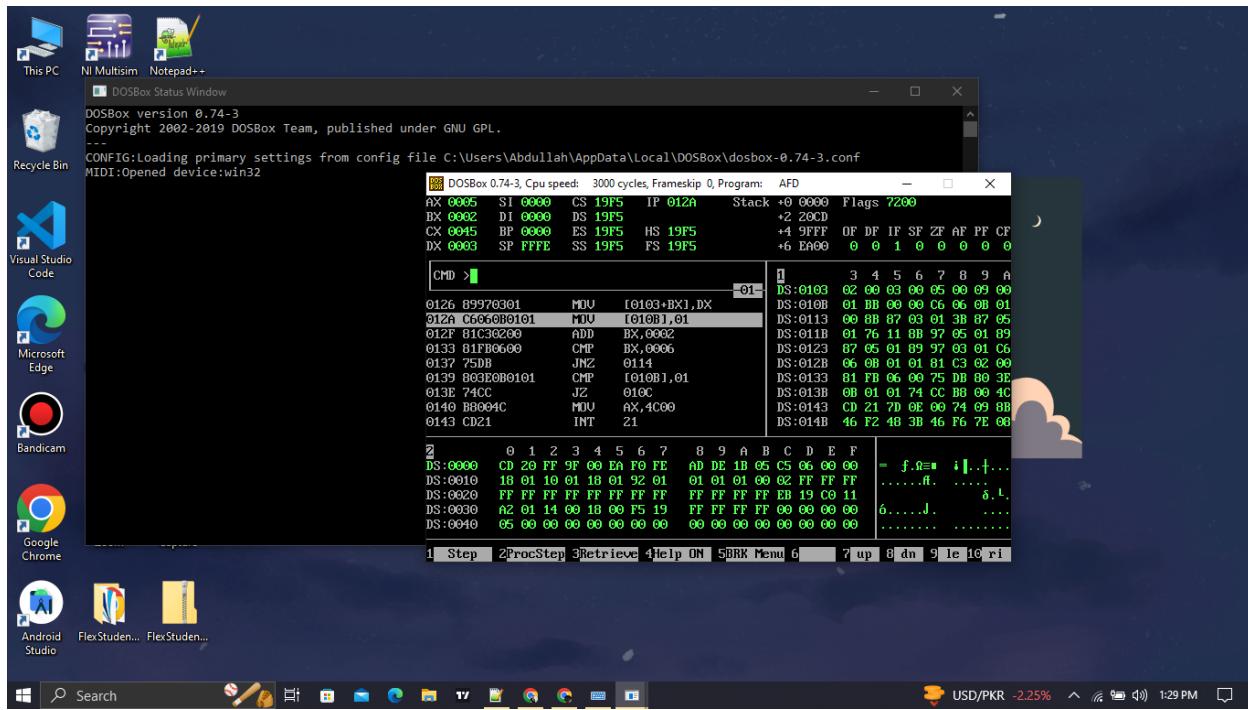


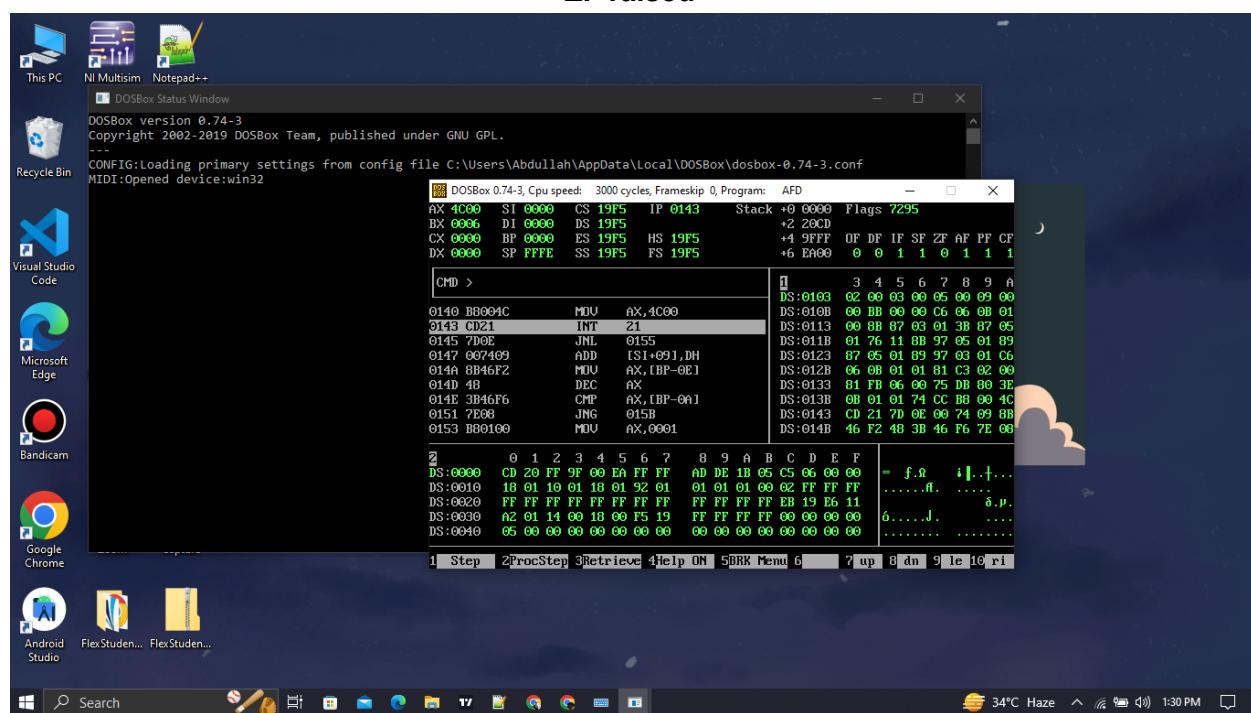
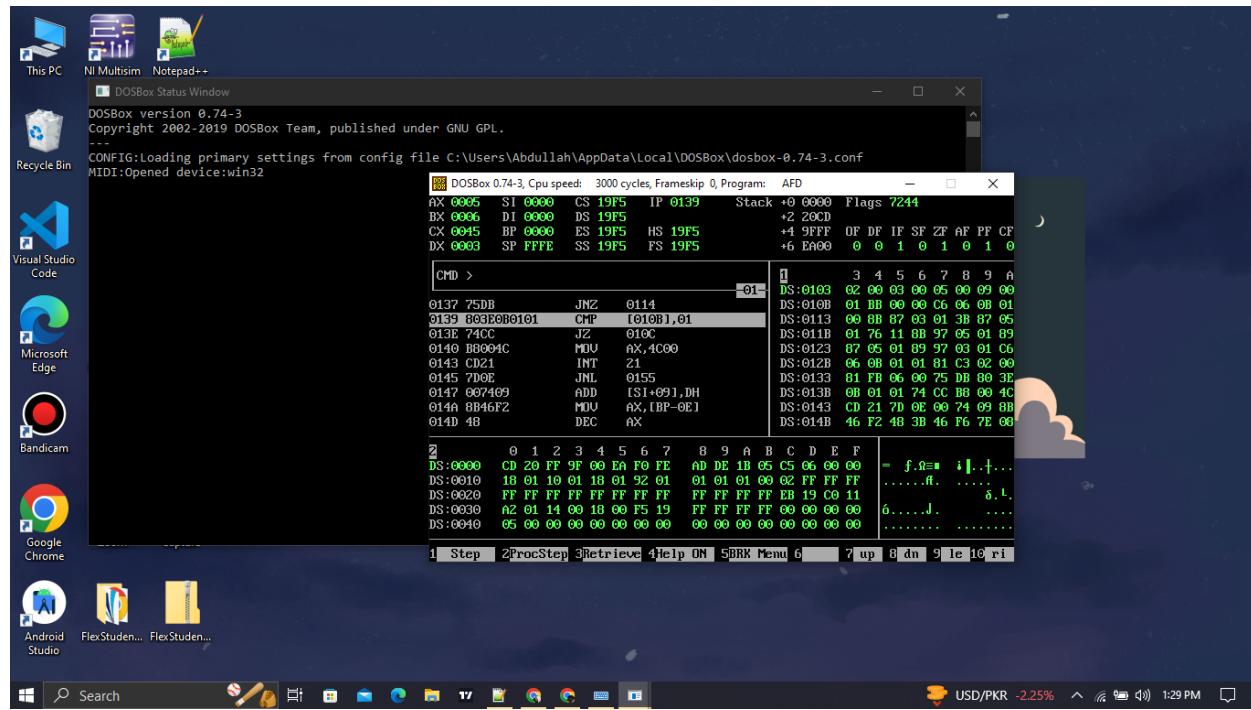


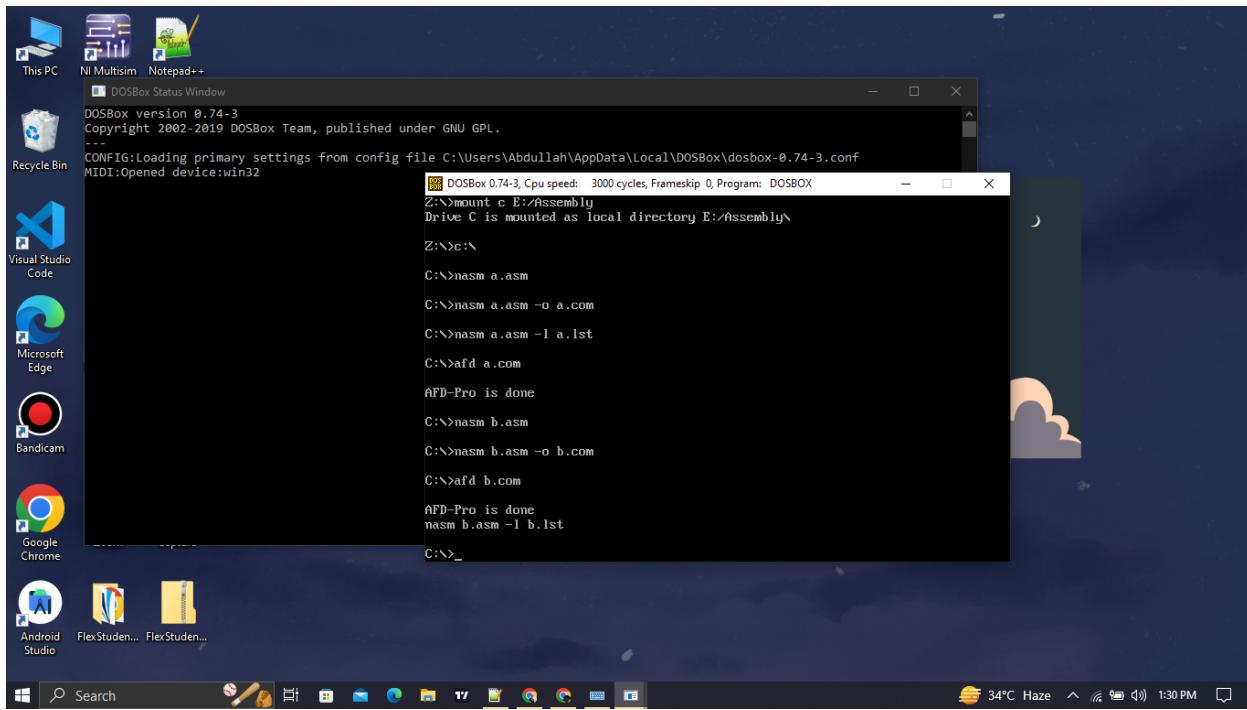
All commands in DosBox

3.3(b):





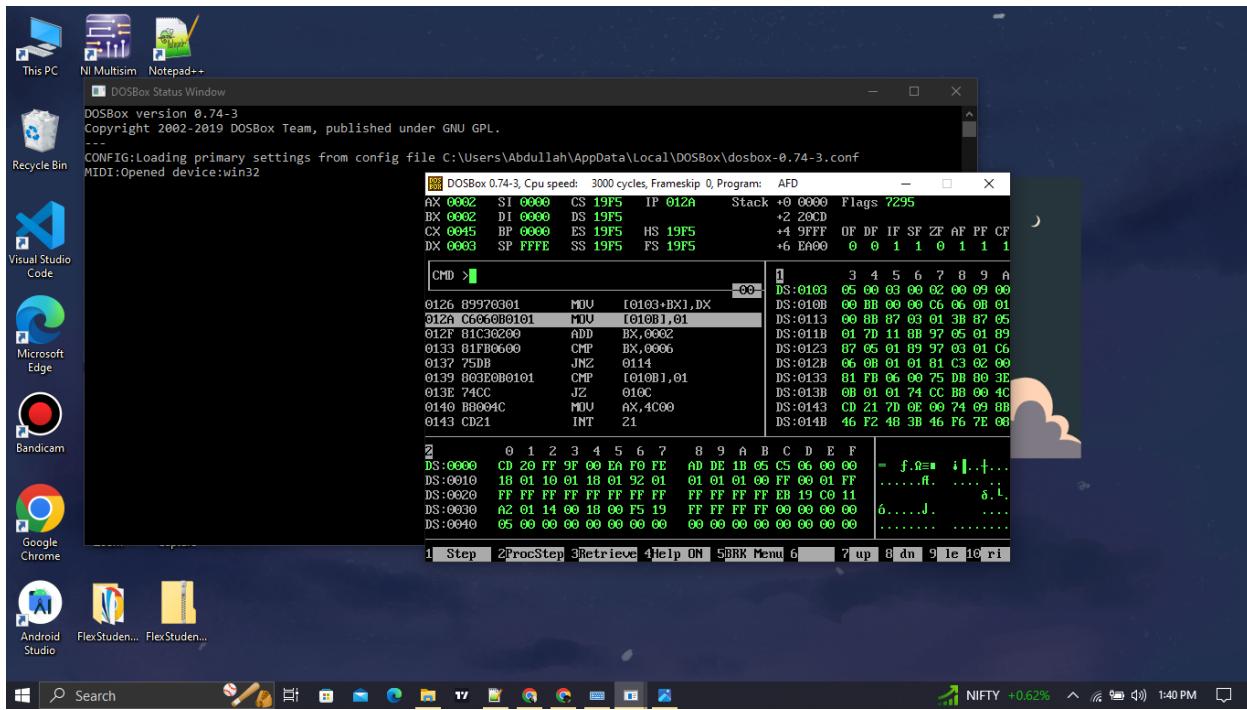




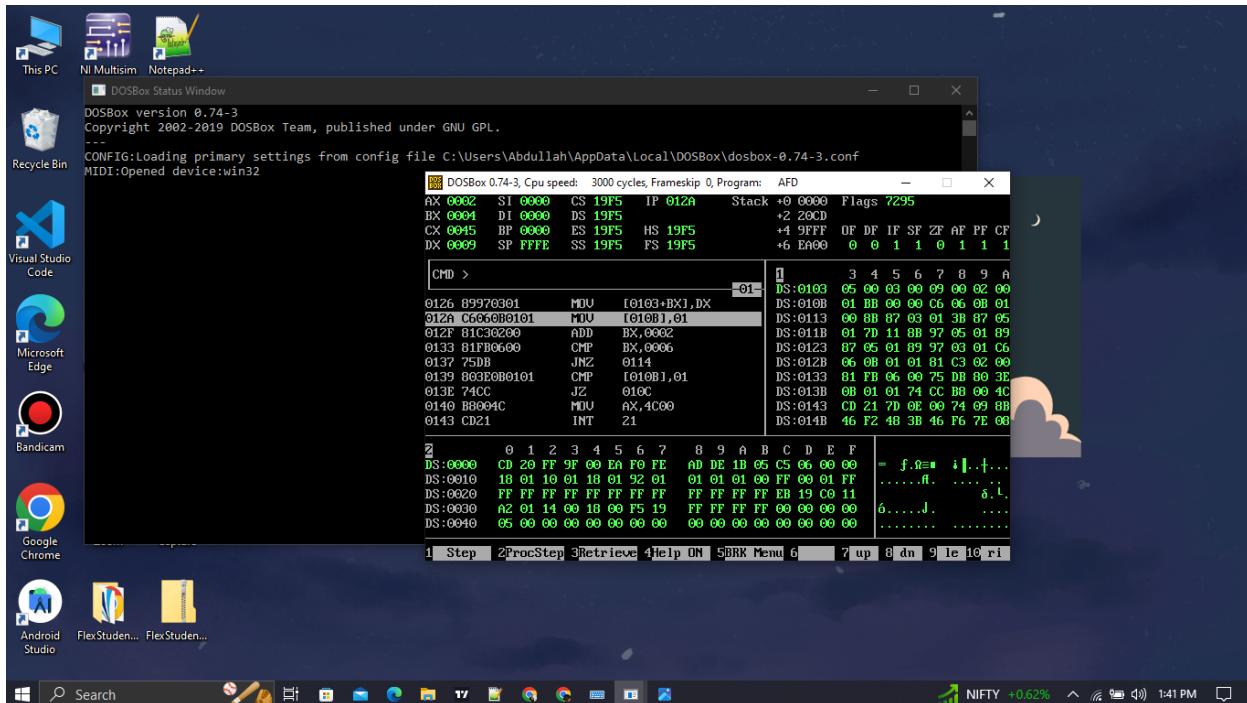
All commands in DosBox

2. Descending order.

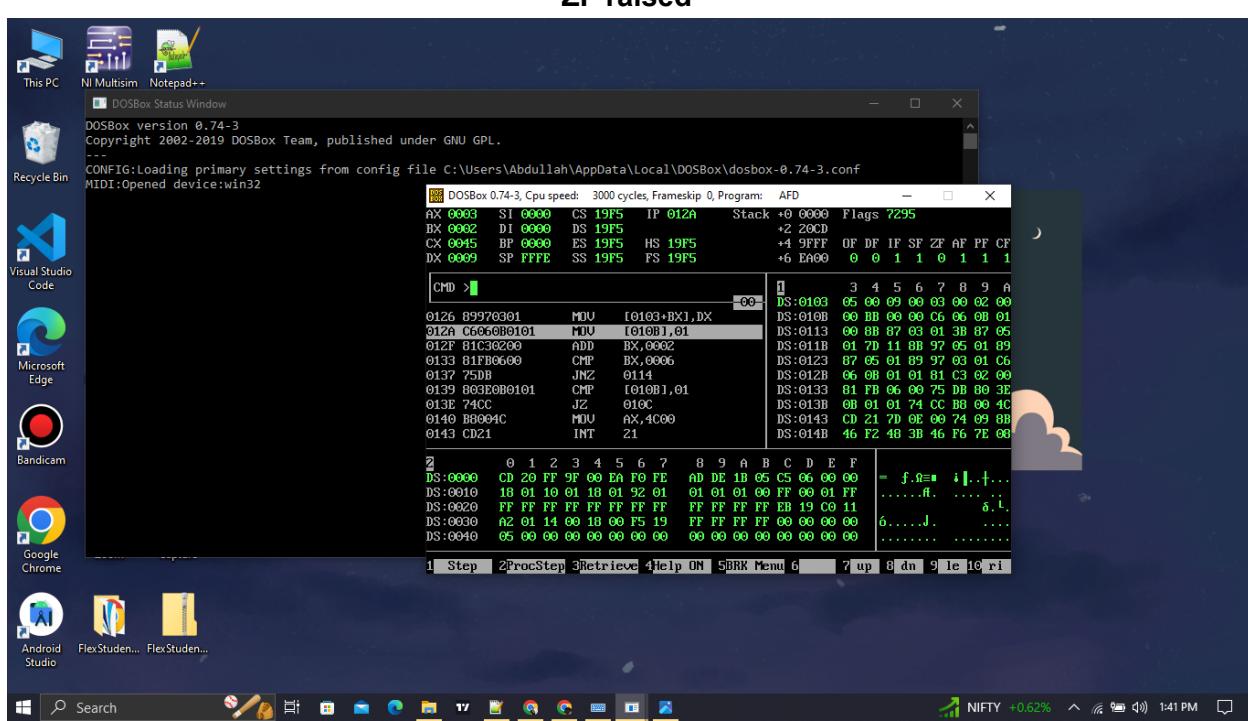
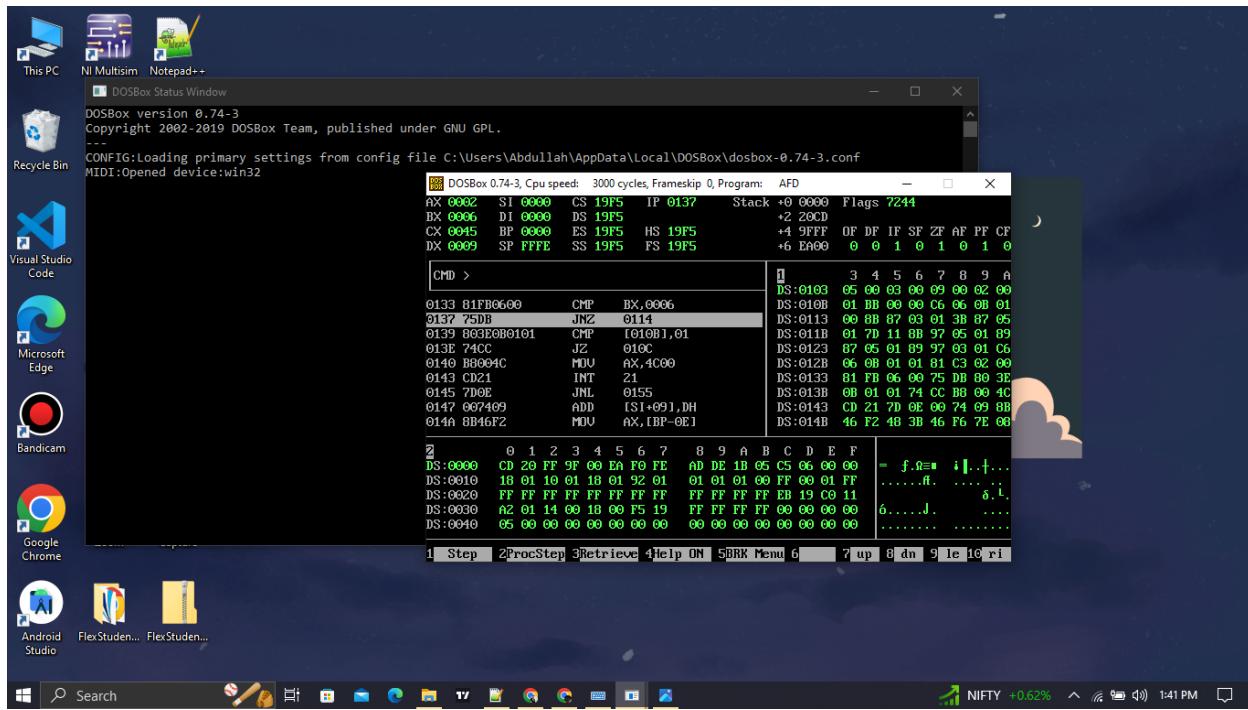
Screenshots:

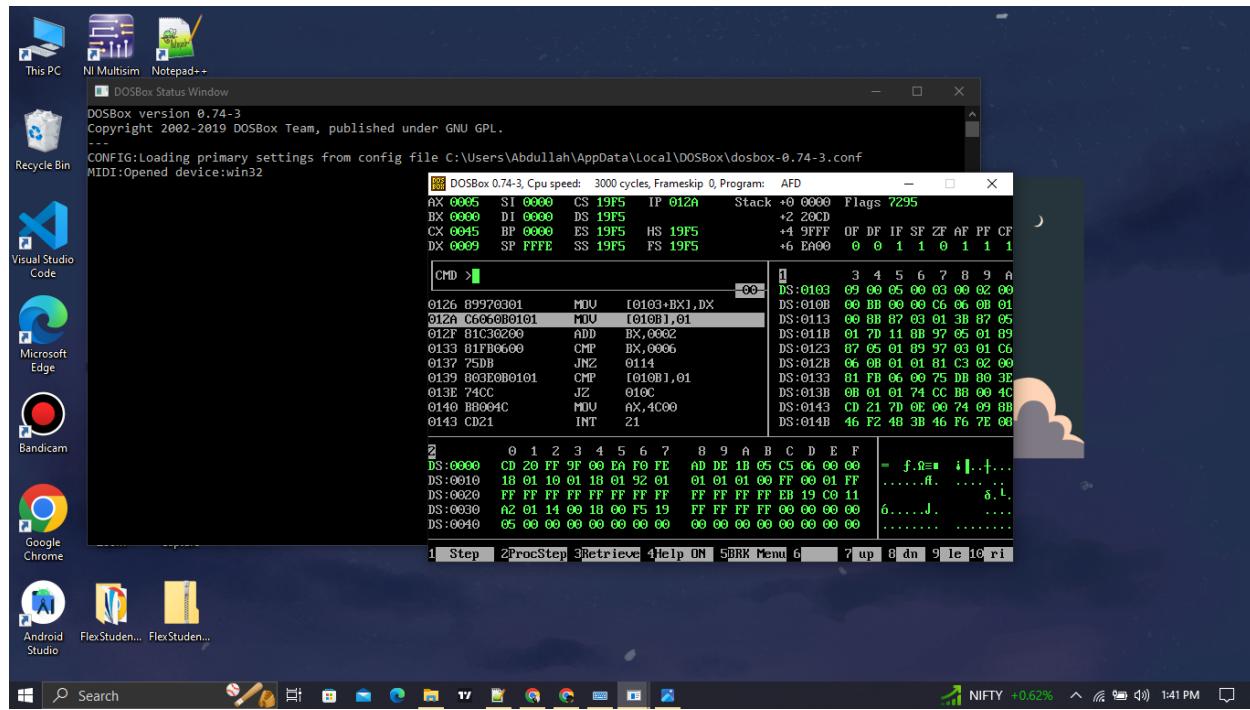


3 swap 2 and SF raised

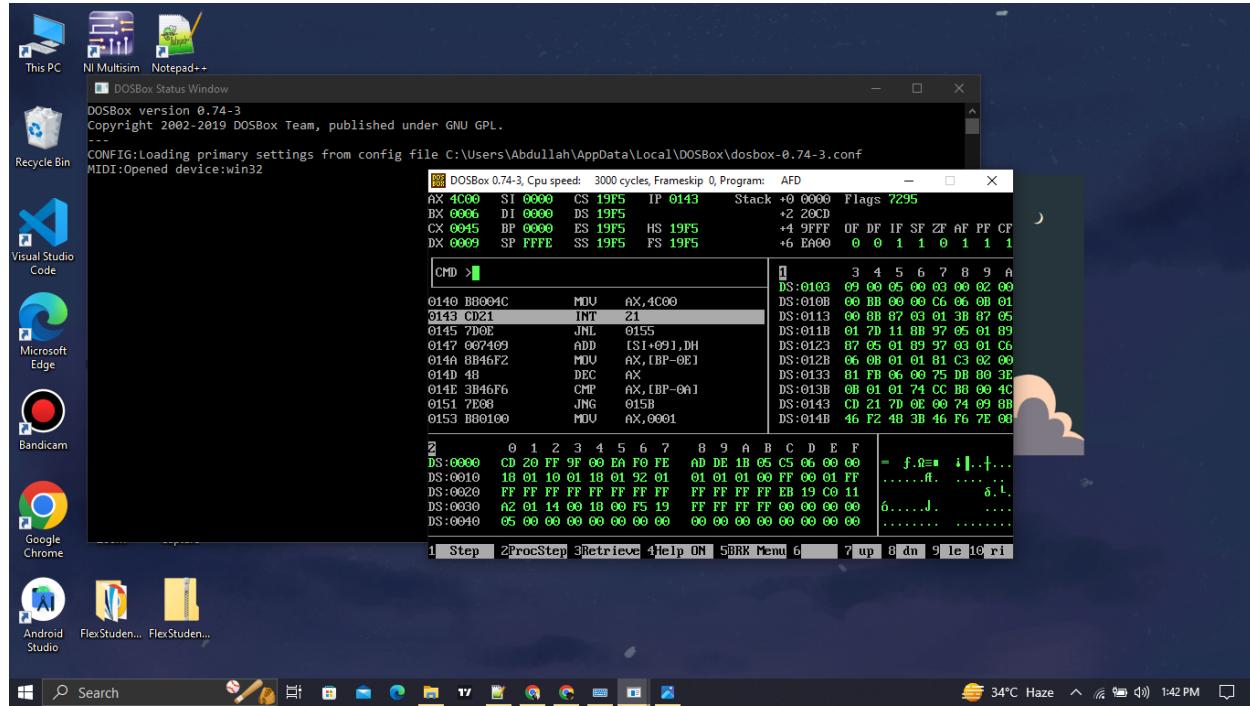


9 swap 2 and SF raised

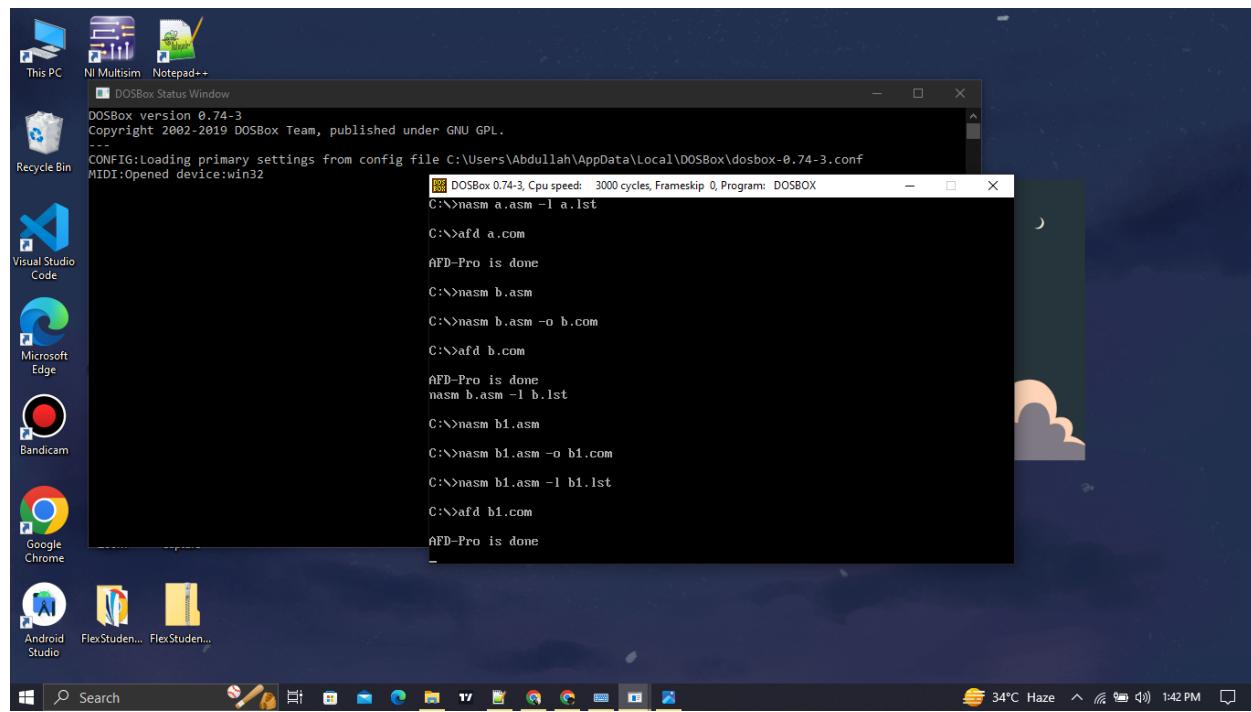




9 swap 5 and SF raised



All in descending order, ZF raised and end



All commands in DosBox