Alexandria University,

Faculty of Engineering,

Computer and Systems Engineering Dept.

CS222: System programming

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Lab (2) Report

Name:

Abdel-Fatah Mohamed Abdel-Fatah. (24)

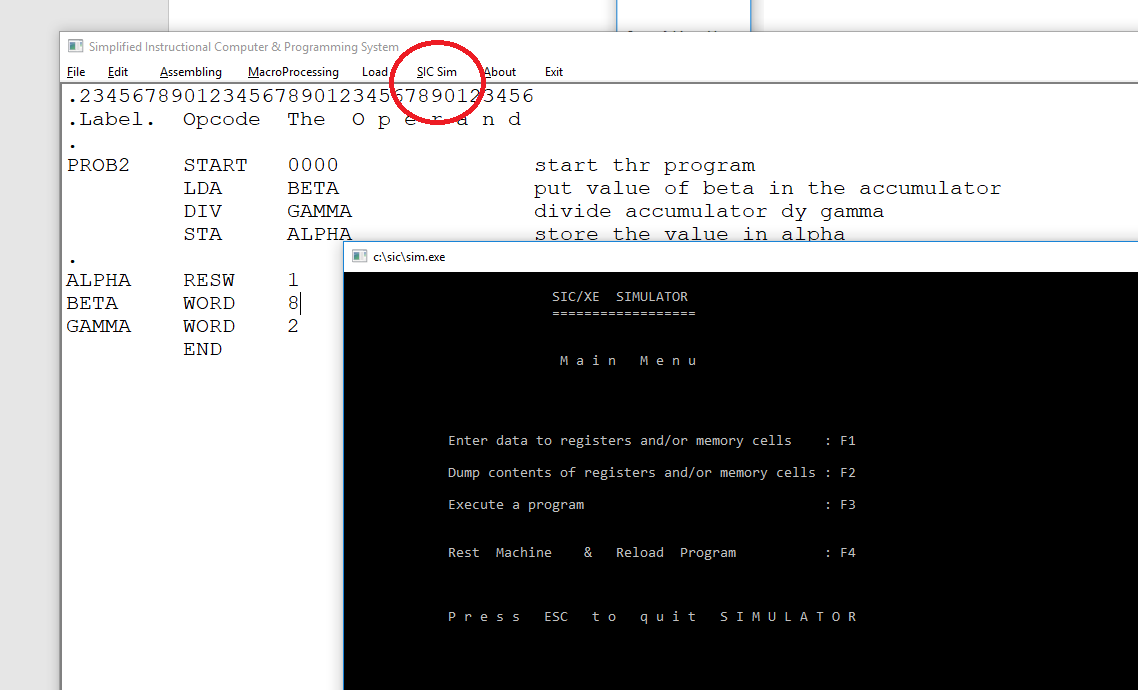
Content:

1. Simulator.
2. PROGRAMS.

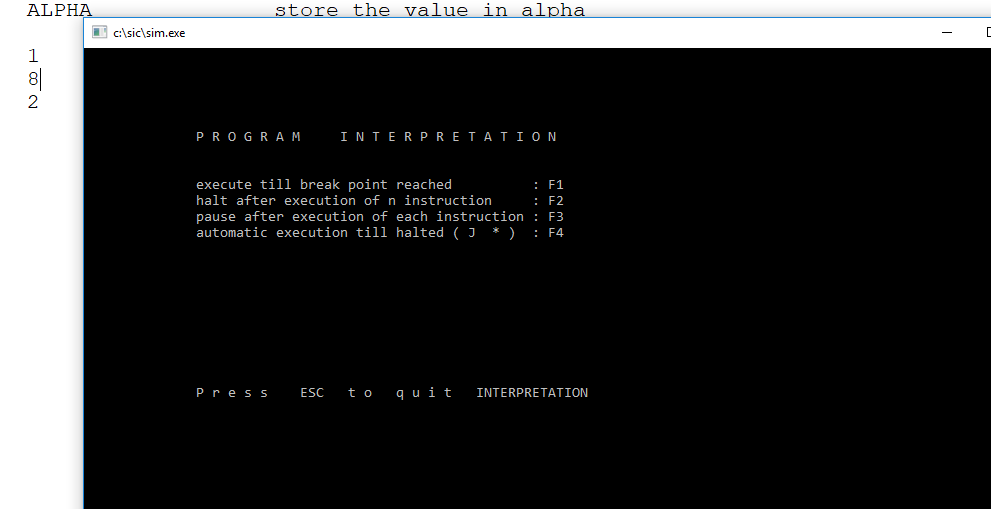
1. Write a program that searches for a certain byte in a string, if found, put the address of the byte in register A else, put 0xFFFFF.
2. Read a string from an input device and print it reversed to an output device.
3. Read a string from an input device and print the string to an output device after converting it to UPPER case.
4. Implement the bubble sort to sort characters in a string.

\*\*\*Simulator:

(before all examples).

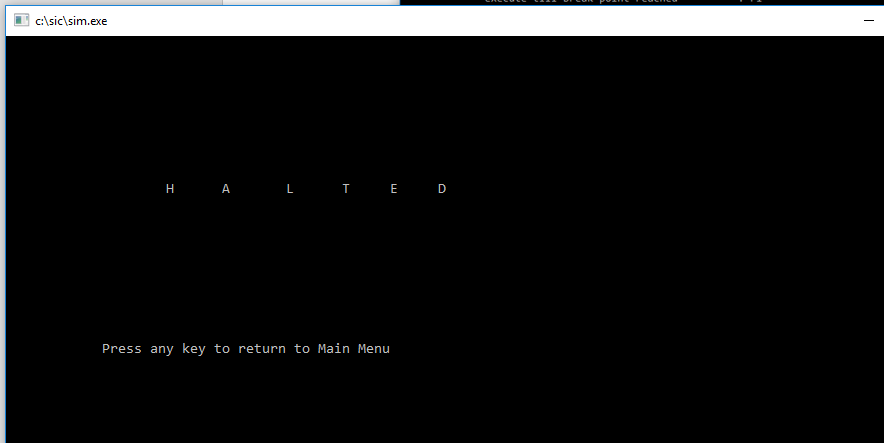


* 1. Execute a program (F3).

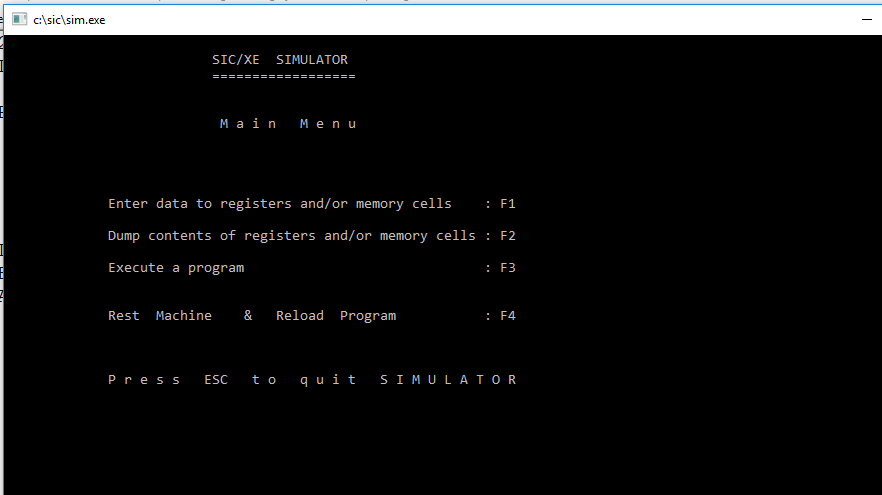


b. Automatic execution till halted (F4):

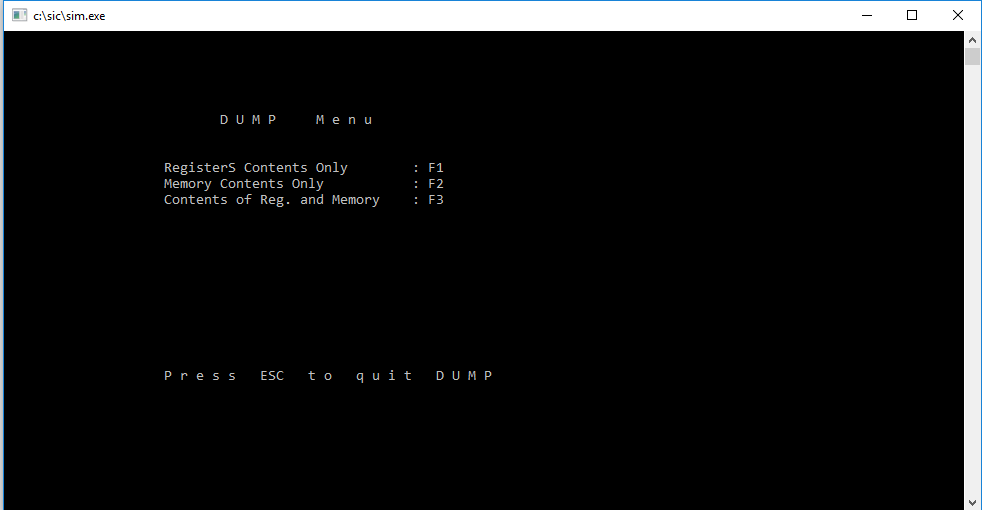
And press any button to execute instruction till the end.



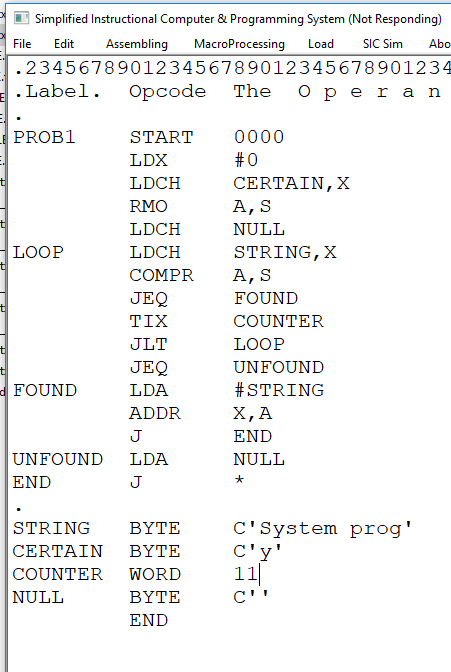
C. Dump contents of registers and/or memory cells (F2):



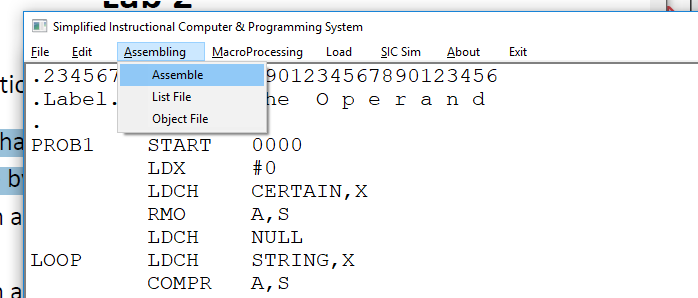
D. Contents of Reg. and Memory (F3):

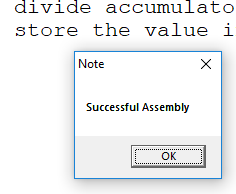


1. Write a program that searches for a certain byte in a string, if found, put the address of the byte in register A else, put 0xFFFFF:
2. Code:



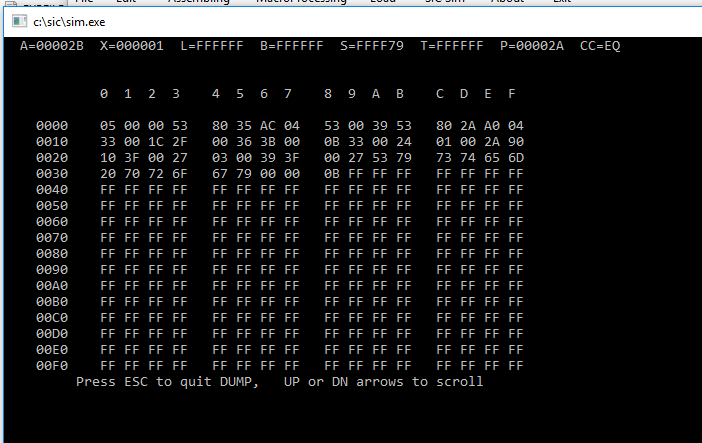
1. Assembling:



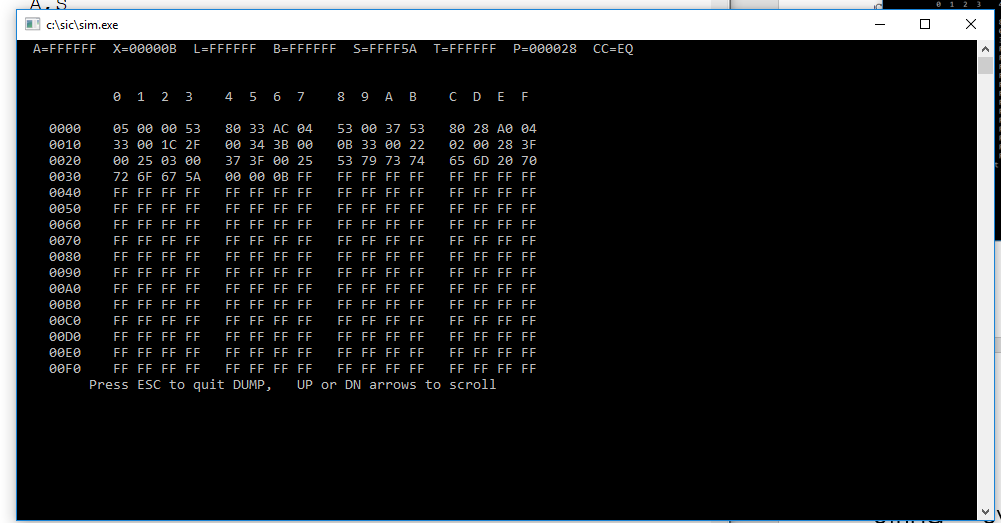


1. Sample run:

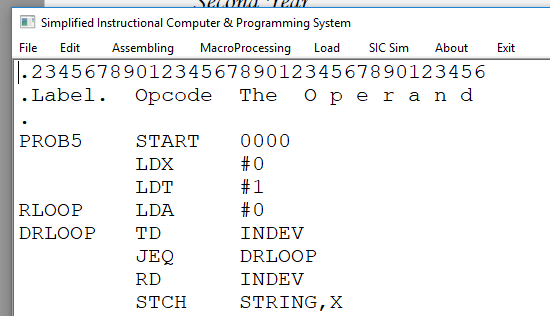
String = " System prog ", Certain = 'y',

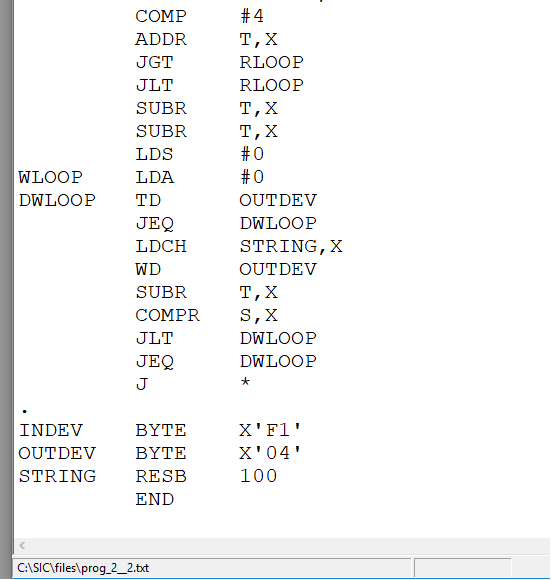


String = "System prog", Certain = 'Z',

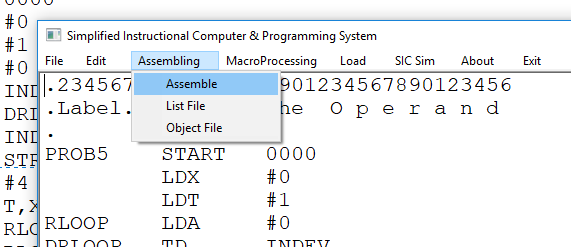


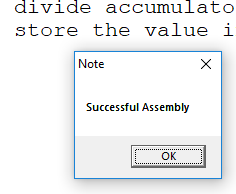
1. Read a string from an input device and print it reversed to an output device:
2. Code:



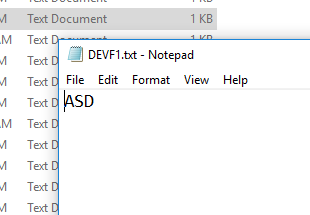
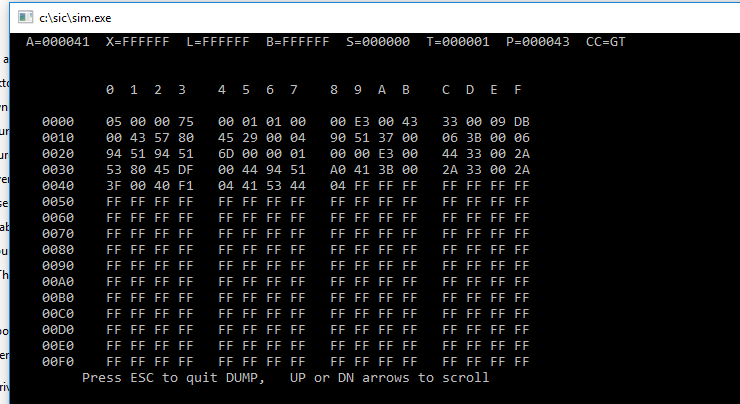


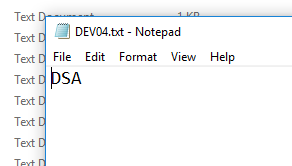
1. Assembling:

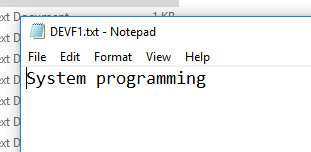


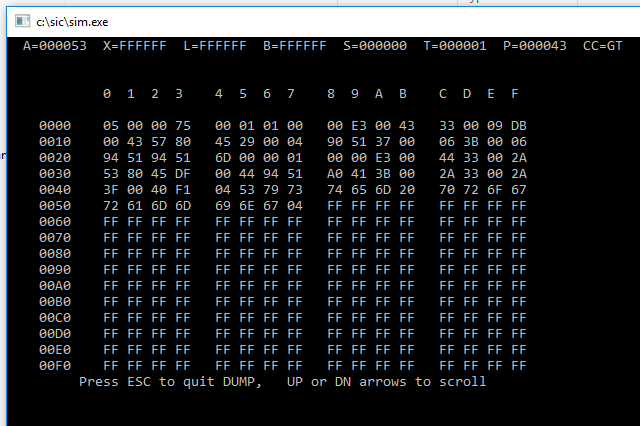


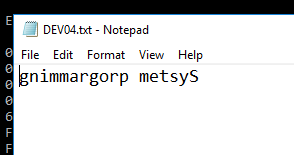
1. Sample run:

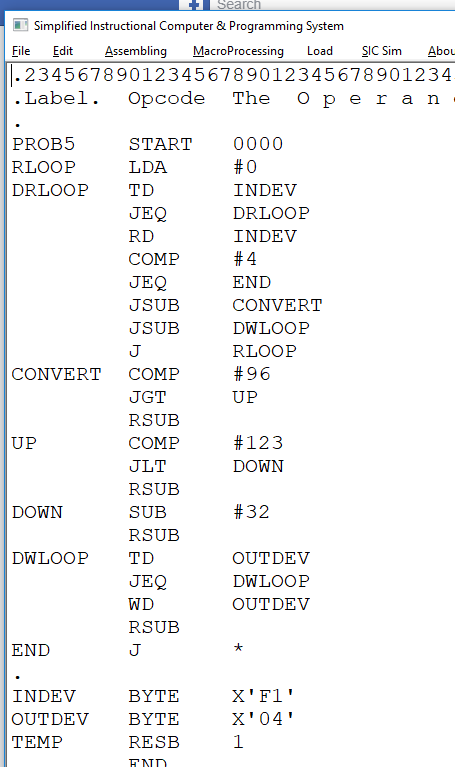




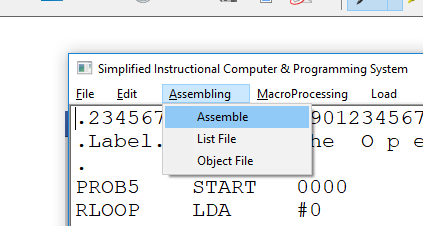


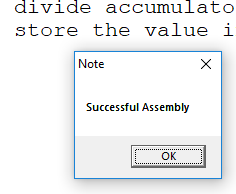


1. Read a string from an input device and print the string to an output device after converting it to UPPER case:
2. Code:

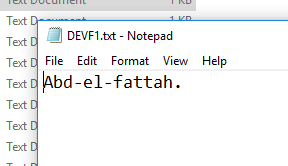


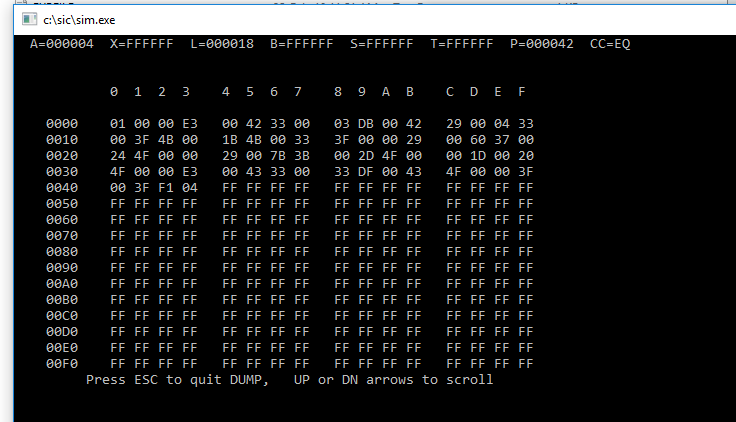
1. Assembling:

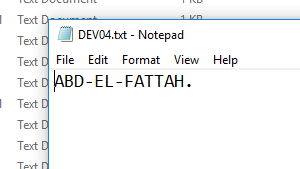




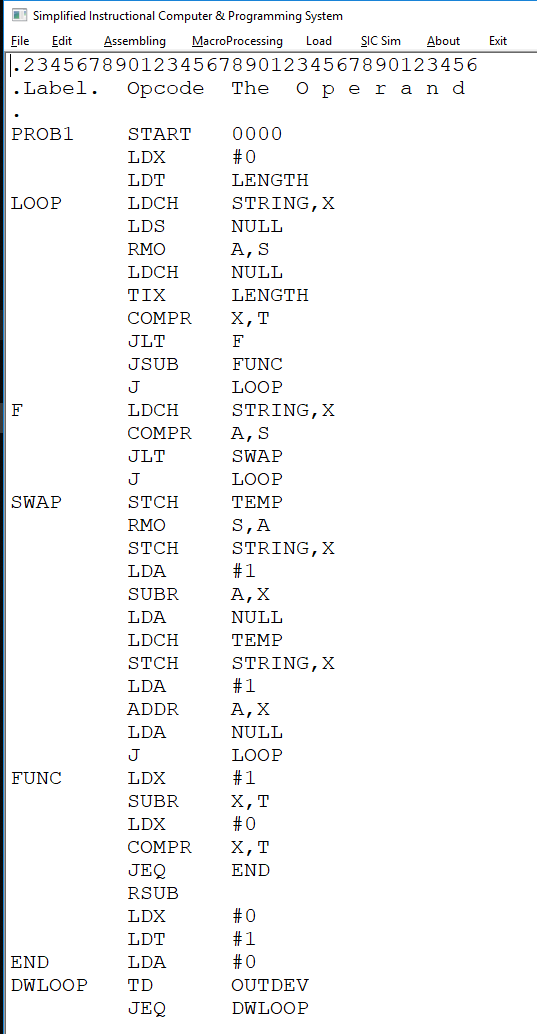
1. Sample run:

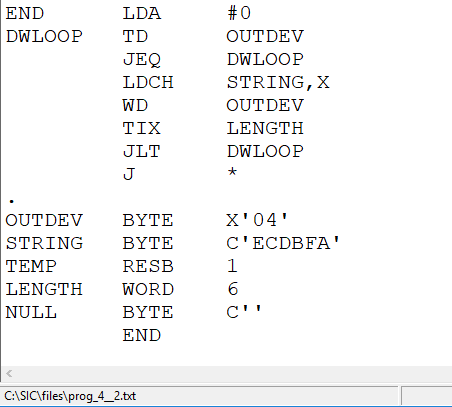




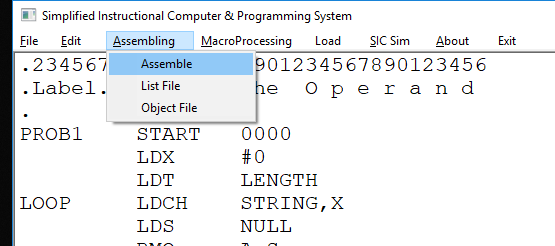


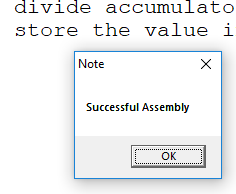
1. Implement the bubble sort to sort characters in a string:
2. Code:





1. Assembling:





1. Sample run:

String = " ECDABF " output = "ABCDEF"

