

## BIM303 MICROCOMPUTERS LAB EXPERIMENT #2

- Objective(s)**
- Become familiar with memory copy operations in 8086 emulator software.
- Lab Work**
- Write a program that reverses the order of the characters of 'BIM303-MICROCOMPUTERS.'
  - 1- Write 'BIM303-MICROCOMPUTERS' into memory (DS:3000h-DS:3014h)
  - 2- Read the characters from memory and write the reversed form into the memory location (DS:3020h-DS:3034h)
  - **It is mandatory to use stack operations.** You may use the *LOOP* command to handle repeating operations for each list element.

**Example:**

Before Execution		After Execution	
The original list		Final list	
3000h	'B'	3020h	'S'
3001h	'I'	3021h	'R'
3002h	'M'	3022h	'E'
3003h	'3'	3023h	'T'
3004h	'0'	3024h	'U'
3005h	'3'	3025h	'P'
3006h	'-'	3026h	'M'
3007h	'M'	3027h	'O'
3008h	'I'	3028h	'C'
3009h	'C'	3029h	'O'
300Ah	'R'	302Ah	'R'
300Bh	'O'	302Bh	'C'
300Ch	'C'	302Ch	'I'
300Dh	'O'	302Dh	'M'
300Eh	'M'	302Eh	'-'
300Fh	'P'	302Fh	'3'
3010h	'U'	3030h	'0'
3011h	'T'	3031h	'3'
3012h	'E'	3032h	'M'
3013h	'R'	3033h	'I'
3014h	'S'	3034h	'B'

**Evaluation:** You must complete your work until lab hour. You will be evaluated during the lab session. **Your code should not contain any comment lines.**

**NOTE:** Students who do not submit their assignments through the ESTUOYS system will be graded with **0 (zero)** points. Late submissions will not be accepted.