



HACETTEPE UNIVERSITY  
ELECTRICAL AND ELECTRONICS ENGINEERING  
ELE338 MICROPROCESSOR ARCHITECTURE AND  
PROGRAMMING LAB.  
EXPERIMENTAL WORK 3  
PROCEDURE USAGE AND STACK OPERATIONS  
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## Results



The screenshot shows a window titled "emulator screen (80x25 chars)" with a black background and white text. The text displays a table of student grades. The table has two columns: the first column lists student identifiers (A1, A2, A3, B1, B2, B3, C1, C2, C3, D, F3, PASS, FALL, TOTAL) and the second column lists their corresponding grade values (15, 06, 06, 07, 06, 08, 04, 06, 09, 09, 14, 77, 14, 91). The text is formatted with a colon and a space between the identifier and the value.

Grade	Students
A1	:15
A2	:06
A3	:06
B1	:07
B2	:06
B3	:08
C1	:04
C2	:06
C3	:09
D	:09
F3	:14
PASS	:77
FALL	:14
TOTAL	:91

## Comment

In my code, I first defined the values I will enter in the data section, the values I will increase, the articles I press on the screen. I sent the values to the SI register with the LEA command. I first compared the values to find the position of the values. When I found the value range, I sent it instead of that value and increased the value by 1. Then I incremented the SI value by one and moved on to the next number, and I did this one by one for all numbers.

After finding the position of the numbers, I converted the hex values to decimal values in order to print the values I found in the row. Doing this one by one to find all the letter grade numbers, I pressed the screen.