Course: ENSF 337 – Fall 2020

Lab #: Lab 4

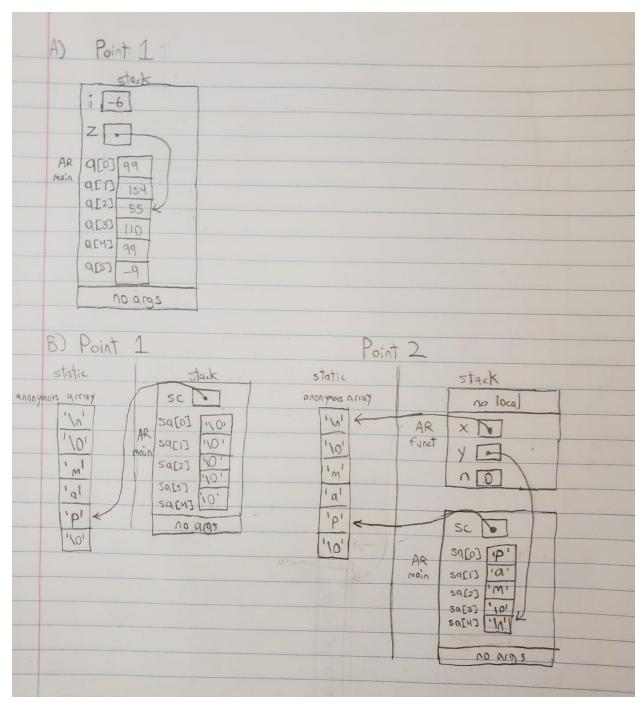
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Lab Section: B03

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Exercise A and B:



Exercise C Output:

Array a has 5 elements and macro ELEMENTS returns 5
Array b has 20 elements and macro ELEMENTS returns 20

Exercise D Output:

TESTING strlen FUNCTION ...

Expected to display: my_string length is 0. my_string length is 0.

Expected to display: my_string size is 100

my_string size is 100 bytes.

Expected to display: my_string contains

my_string contains banana

Expected to display: my_string length is 6.

my_string length is 6.

Expected to display: my_string contains "".

my_string contains:""

Expected to display: my_string length is 0.

my_string length is 0.

Expected to display: my_string size is still

100 bytes.

my_string size is still 100 bytes.

TESTING strncat FUNCTION ...

Expected to display: my_string contains
"tic"

my_string contains "tic"

Expected to display: my_string length is 3.

my_string length is 3.

Expected to display: my_string contains "tic-tac"

my_string contains:"tic-tac"

Expected to display: my_string contains "tic-tac-toe"

my_string contains:"tic-tac-toe"

Expected to display: my_string has 11

characters.

my_string has 11 characters.

Using strcmp - C library function:

Expected to display: "ABCD" is less than

'ABCDE'

"ABCD" is less than "ABCDE"

TESTING strcmp FUNCTION ...

"ABCD" is less than "ABND" ... strcmp

returns -11

"ABCD" is equal "ABCD" ... strcmp returns 0

"ABCD" is less than "ABCd" ... strcmp

returns -32

"Orange" is greater than "Apple" ... strcmp

returns

Exercise E Output:

```
Enter a real number or press Ctrl-D to quit: 23.4
Your real number value is: 23.400000
Enter a real number or press Ctrl-D to quit: .56
Your real number value is: 0.560000
Enter a real number or press Ctrl-D to quit: -.23
Your real number value is: -0.230000
Enter a real number or press Ctrl-D to quit: -0.45
Your real number value is: -0.450000
Enter a real number or press Ctrl-D to quit: -0.0000067
Your real number value is: -0.000007
Enter a real number or press Ctrl-D to quit: 564469999
Your real number value is: 564469999.000000
Enter a real number or press Ctrl-D to quit: +8773469
Your real number value is: 8773469.000000
Enter a real number or press Ctrl-D to quit: +.5
Your real number value is: 0.500000
Enter a real number or press Ctrl-D to quit:
```