Programming Fundamental – ENSF 337
Lab 4
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B01
October 8, 2019

Exercise C

```
jaych@DESKTOP-DILG265 /cygdrive/c/ensf337/lab4
$ gcc -Wall lab4exC.c

jaych@DESKTOP-DILG265 /cygdrive/c/ensf337/lab4
$ ./a.exe
Array a has 5 elements and macro ELEMENTS returns 5
Array b has 20 elements and macro ELEMENTS returns 20
```

Exercise D

```
jaych@DESKTOP-DILG265 /cygdrive/c/ensf337/lab4
$ gcc -Wall lab4exD.c
lab4exD.c: In function ‘main’:
lab4exD.c:109:12: warning: too many arguments for format [-Wformat-extra-args]
     printf("\n\"ABCD\" is less than \"ABCDE\"", strcmp("ABCD", "ABCDE"));
            ^~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

jaych@DESKTOP-DILG265 /cygdrive/c/ensf337/lab4
$ ./a.exe

TESTING strlen FUNCTION ...

Expected to display: my_string length is 0.
my_string length is 0.
Expected to display: my_string size is 100 bytes.
my_string size is 100 bytes.
Expected to display: my_string contains banana.
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 -1
"ABCD" is equal "ABCD" ... strcmp returns 0
"ABCD" is less than "ABCd" ... strcmp returns -1
"Orange" is greater than "Apple" ... strcmp returns 1
```

Exercise E

```
jaych@DESKTOP-DILG265 /cygdrive/c/ensf337/lab4/lab4exE
$ ./a.exe


Enter a double or press Ctrl-D to quit: 23.4

Your double value is: 23.400000

Enter a double or press Ctrl-D to quit: .56

Your double value is: 0.560000

Enter a double or press Ctrl-D to quit: -.23

Your double value is: -0.230000

Enter a double or press Ctrl-D to quit: -0.45

Your double value is: -0.450000

Enter a double or press Ctrl-D to quit: -0.0000067

Your double value is: -0.000007

Enter a double or press Ctrl-D to quit: 564469999

Your double value is: 564469999.000000

Enter a double or press Ctrl-D to quit: +8773469

Your double value is: 8773469.000000

Enter a double or press Ctrl-D to quit: +.5

Your double value is: 0.500000

Enter a double or press Ctrl-D to quit:
Good Bye.
```