# ENGG*1410: "Introductory Programming for Engineers", Assignment #10 "FILE I/O"

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**Start Date: Week #10, Due Date: Week #11 (Friday, 5:00 PM) in Dropbox**

1. The program below seeks to open two files: (a) An input file, (b) an output file. It then copies the contents of the input file to the output file.

   (a) Compile and run the program.

   (b) There are several problems with the C program written. Identify these issues and fix them.

```
#include<stdio.h>
int main(void)
{

    char inName[64], outName[64];
    FILE *in, *out;
    int c;

    // get file name from user
    printf("Enter name of input file to be copied: ");
    scanf("%63s",inName);

    printf("Enter name of output file: ");
    scanf("%63s",outName);

    // open Input and output files
    in = fopen(inName, "r");
    out = fopen(outName,"w");

    // copy inName to outName
    while ( (c =getc(in))  != EOF)
      putc (c, out);

    printf("File %s has been copied to File %s.\n", inName, outName);

    return 0;
}
```

2. Write a program to copy one file to another (similar to the above program), replacing all lowercase characters with their uppercase equivalents.

3. Write a program that merges lines alternately from two files and writes the results to stdout. If one file has fewer lines than the other, the remaining lines from the larger file should simply be copied to stdout.

4. Write a program that writes columns m through n of each line of a file to stdout. Have the program accept the values of m and n from the terminal window.

5. Write a program that displays the contents of a file at the terminal 20 lines at a time. At the end of each 20 lines, have the program wait for a character to be entered from the terminal. If the character is the letter q, the program should stop the display of the file; any other character should cause the next 20 lines from the file to be displayed.