ICS 103, Term 092

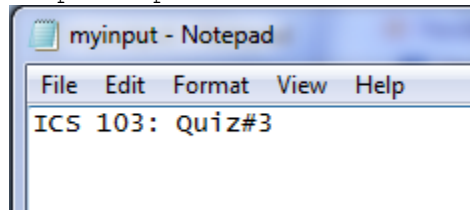## Computer Programming in C
Quiz# 3

Date: Tuesday, April 27, 2010

Q1. Write function that receives as input a character and returns true if the character is an alphabetic character.
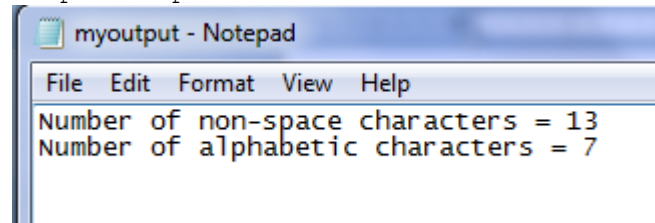
```
int IsAlphab (char c){
    return (c>='a' && c<='z') || (c>='A' && c<='Z');
}
```

Q2. Write a program to open an input file, myinput, and count the number of non-space characters and the number of alphabetic characters and print the results in the output file myoutput. Use the function developed in Q1. Your program should handle the case of file not found error.

Sample Input: Sample Output:

myinput - Notepad

File Edit Format View Help

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myoutput - Notepad

File Edit Format View Help

Number of non-space characters = 13
Number of alphabetic characters = 7

```
#include <stdio.h>
#include <stdlib.h>

int IsAlphab (char c){
    return (c>='a' && c<='z') || (c>='A' && c<='Z');
}

int main(void)
{
    FILE *infile, *outfile;
    char c;
    int ccount=0, alphacount=0;

    infile = fopen("myinput","r");
     if (infile==NULL) {
       printf("Sorry, input file not found\n");
       system("pause");
       exit(1);
```

```c
    }
    outfile = fopen("myoutput","w");

    while (fscanf(infile, "%c", &c) != EOF) {
      ccount += (c != ' ');
      alphacount += IsAlphab(c);
    }

    fprintf(outfile,"Number   of   non-space   characters   =   %d
\n",ccount);
    fprintf(outfile,"Number   of   alphabetic   characters   =   %d
\n",alphacount);

    fclose(infile);
    fclose(outfile);

system("pause");
return 0;
}
```