CSCD 240
Lab 6

Problem Description:
You are provided with a big data file **cscd240lab6.txt** containing floating point numbers and two integers. The first line of the file is two integers indicating the number of rows and columns of floating point numbers in the file you have to process.

You are required to design and implement a program that can read into memory the data file named cscd240lab6.txt. As you read the floating point numbers you will need to do some statistics on the data.

NOTE: You input will come from redirection of stdin. If you use file IO function you will receive 0 points. You are required to use scanf(), printf(), and Unix I/O redirection.

Your program will:

1. Maintain simple statistics of the floating point values within the range of:
   0=< datum <= 30
   30<datum <= 90
   datum > 90

   Your program will also find the average, maximum and minimum number in the entire data file.

2. You will output to the screen exactly as the following. The table element alignment is a part of the grading criteria.

Correct output would appear as (obviously xx will be replaced with values)

0<=data<=30	30<data<=90	data>90	Max	Min	Average
xxxxx	xxxxxx	xxxxx	xx.xx	x.xx	xx.xx

3. Provide an output run of your program as a separate text file, named cscd240Lab6out.txt, generated by UNIX redirection of stdout.

Submission:

Zip file containing:

- Your C file named cscd240Lab6.c
- The input file
- The output file
- A makefile

You should know the naming scheme by now.