

CS 2073-002 Computer Programming with Engineering Applications

Fall 2009

Instructor [Dr. Turgay Korkmaz](#)

Homework 6

Due by Oct 30 (Friday), 2009 (5:00pm)

!!!! NO LATE HOMEWORK WILL BE ACCEPTED !!!

Total 50 points

HW Question: (files, loop, if-else)

Suppose we have 10 lines in a file and 4 input values in each line. For an example, see [input6.txt](#). The values in each line represent UI, LI, UJ, LJ bounds in the following double sum formula.

$$total = \sum_{i=LI}^{UI} \sum_{j=LJ}^{UJ} \frac{i+j}{i*j}$$

Write a C program that reads upper and lower bounds for i and j , namely UI, LI, UJ, LJ from that file and compute *total* for each input line and print it into an output file, say output6.txt. Note that before computing *total* you need to check that for the current input line, all of the input values UI, LI, UJ, LJ are greater than 0, and $UI > LI$ and $UJ > LJ$. If the values in the current line are invalid, then your program should print a message like "invalid input" into output file, then go and process the next input line. Else if the current input values are valid then your program should compute *total* and print it into the output file, then go and process the next input line.

What to return: **!!!! NO LATE HOMEWORK WILL BE ACCEPTED !!!**

Save your program as hw6.c, run it for the given input6.txt file. The results should be saved into output6.txt. THEN, go to **WebCT**, and submit your files **hw6.c**, and **output6.txt** before the deadline. When you are writing your C program, don't forget to include **/* COMMENTS */**