

CIS*2500 W20 Assignment 4: Questions & Answers Part 3

“I think there may be an error on the input file for Q1A or the description. In the assignment description for the commands, to check the number of spaces I need to put in between I downloaded the file and highlighted the 2nd line of the input commands for the int file which suggested 3 spaces between. However, on the sample file there are only 2 spaces (found using same process)

How many spaces should we be accounting for in the input?”

No error.

The idea was always to skip over the white space. One space, two spaces, three spaces, it should make no difference.

The examples did, mostly have 3 spaces between them. I had not noticed how consistent I was when creating the examples. I put in more than 1 space because I wanted to separate out the arguments for ease of reading. The intent was not to always have 3.

However, thank you for pointing this ambiguity out. I have clarified the original intent in the most recent assignment update.

Mark Wineberg

“I have been working away at assignment 4 and noticed that `stdlib.h` must house `value_t` and `key_t` in some manner or another. When I try to compile using my new typedef'd `value_t` and `key_t` I get an error that says its already defined. I know it compiles if I comment out `stdlib.h` but I know ill need that header for other functions. I tried putting the typedefs before but I still get the same errors. Do you know of a way to circumvent this issue?”

I looked into this and am not sure what is going on. You are the first student who ran into this problem.

When I rechecked what is supposed to be `stdlib.h` `key_t` was not one of the defined datatypes. I work on the Mac not Linux, so I cannot check `gcc stdlib.h` in Linux. I checked the Mac version, and there was no direct definition of `key_t` (nor `value_t`). There where a bunch of `#includes` in the `.h`, and I didn't look there, so it might exist in those libraries and then get included, I can't tell.

In any case, if the problem persists, it very well might, just change `key_t` to `key_lt` and `value_t` to `value_lt` and do a search replace in your files. You will not lose marks if you do this. You just need to be consistent.

Mark Wineberg

PS I will write the change in all caps because lower case `l` (`L`) looks like uppercase `I` (`i`). `KEY_LT` and `VALUE_LT`, just write it lower case, because by convention uppercase means a constant variable, not a type. You can choose another type name that makes sense if you don't like these.

“On A4q1a_char

We were told that we will only need to change print functions, and well use strcpy with the values, since its char. However, my remove stuff isn't working with a4q1a_char, while they work with a4q1a_int.

They do not give error with the char one, but they don't do anything.

Is there a need to make a new functions for remove? I don't know why it won't work?”

I do not know why it is not working for you. There should be no need to change the code for remove.

There is one exception, but that exception shouldn't affect the behaviour of the function in the manner you are describing.

All of the remove functions requires you to free a node. When you free a node that has value_t as a char *, then you have to free the string memory. This is not necessary when value_t is an int. See Q&A part 2 document for details.

Apart from this, you will have to try to debug your code. Put in printf statements throughout the functions that are misbehaving. See what is happening to the various variables at each stage. That should help identify the error.

Mark Wineberg

“I had a quick question about the fraction adt in assignment 4. When printing, should we provide the user an option to print both MIXED and SIMPLE on one line?”

No.

While that might be a nice feature, the commands are really just there to test the functionality of your code. Not to produce a fraction interpreting language.

So, keep it simple and stick to the instructions.

Mark Wineberg