```
Script started on 2023-12-06 18:25:20-06:00 [TERM="xterm" TTY="/dev/pts/4" COLUMNS=
a_vitale3@ares:~$ pwd
/home/students/a_vitale3
a_vitale3@ares:~$ cat DoWhatProblems.info
Name: Andrew Vitale

Class: CSC121



Activity: You Want Me To Do What Problems?

Level: 4



Description:



Takes a list of problems from a problem set and displays each individual problem

to complete.

a_vitale3@ares:~$ show-code DoWhatProblems.cpp


DoWhatProblems.cpp:


#include <iostream>
#include <vector>
#include <string>
#include <limits>

using namespace std;

int main()
{

    vector<int> first_probs, second_probs; //problems = {first_probs, secon
    int int_input = 0;
    bool exit = false;
    string input;
    do
    {
        cout << "Enter problems: ";
        do
        {
            if (cin.peek() == '-' && first_probs.size() > second_probs.size
            {
                //cout << 2;
                cin.ignore(1);
                if(isdigit(cin.peek()))
                {
                    cin >> int_input;
                    second_probs.push_back(int_input);
                }
            }
            else if (isdigit(cin.peek()))
            {
                //cout << 1;
                cin >> int_input;
                first_probs.push_back(int_input);
                if (cin.peek() == ',')
                {
                    second_probs.push_back(0);
                }
            }
            else if (cin.peek() != '\n')
            {
                //cout << 3;
                cin.ignore(1);
            }
        } while (cin.peek() != '\n');
        cin.ignore(numeric_limits<streamsize>::max(), '\n');

        cout << "Do problems ";
        for (long unsigned int i = 0; i < first_probs.size(); i++)
        {
            // L1, 4-9, 11, 13-18, 20, 21, 25-30, 80-99
            //cout << "A";
            if (i != first_probs.size()-1 || first_probs.size() == second_p
            {
                cout << first_probs[i];
            }
            if (i < second_probs.size())
            {
                //cout << "B";
                for (int j = first_probs[i]+1; j <= second_probs[i]; j++)
                {
                    //cout << "C";
                    if (i != first_probs.size()-1 || first_probs.size() ==
                    {
                        if ((i == first_probs.size() && i != second_probs.s
                        {
                            cout << ", and ";
                        }
                        cout << ", " << j;
                    }
                }
            }
            if (i != first_probs.size()-1 && i != second_probs.size()-1)
            {
                //cout << "D";
                cout << ", ";
            }
        }
        if (first_probs.size() > second_probs.size())
        {
            if (first_probs.size() > 1)
            {
                cout << ", and ";
            }
            cout << first_probs[first_probs.size() - 1];
        }
        cout << " of L." << endl;

    } while (exit == true);
    return 0;
}
a_vitale3@ares:~$ CPP DoWhatProblems
DoWhatProblems.cpp***


a_vitale3@ares:~$ ./DoWhatProblems.out
Enter problems: L1
Do problems 1 of L.
a_vitale3@ares:~$ ./DoWhatProblems.out
Enter problems: L1-5
Do problems 1, 2, 3, 4, 5 of L.
a_vitale3@ares:~$ ./DoWhatProblems.out
Enter problems: L1-5, 7
Do problems 1, 2, 3, 4, 5, and 7 of L.
a_vitale3@ares:~$ ./DoWhatProblems.out
Enter problems: L1-5, 7, 10-16
Do problems 1, 2, 3, 4, 5, 7, 10, 11, 12, 13, 14, 15, 16 of L.
a_vitale3@ares:~$ cat DoWhatProblems.tpq
Q1:

In what data type can you store something like the problem set name that might be



A1:

You can store it by using the data type string.



Q2:

How can you detect that the problem set name is a quoted string? How can you read



A2:

Using cin.peek() you can tell if the user entered quotation marks. To read in the
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Q3:

If the user's problem set name is a quoted string, how can you remove the quotes f



A3:

I can get rid of it by using cin.ignore( “ )



Q4:

When placing items (say problem numbers?) into a list, how can you keep those item



A4:

By using vectors, they sort themselves.



Q5:

How can you avoid placing a duplicate item into a list?



A5:

I can avoid placing a duplicate item into a list by running a check to make sure n



Q6:

If the problem list is long (like in math or physics), how can you wrap the long o



A6:a_vitale3@ares:~$ exit
exit

Script done on 2023-12-06 18:27:04-06:00 [COMMAND_EXIT_CODE="0"]
```