

```
Script started on Sat 05 Mar 2016 05:40:11 PM CST
\033]0;g_butler4@mars:~/csc122\007[g_butler4@mars csc122]$ pwd
/home/students/g_butler4/csc122
\033]0;g_butler4@mars:~/csc122\007[g_butler4@mars csc122]$ cat Math\033[K.p\033[K
cpp
// Example program
// #include "stdafx.h"
#include <iostream>
#include <string>

using namespace std;

int main()
{
    string test;
    int n = 0;
    bool t = false;
    int tarr[50];
    int temp_h, temp_l;
    cout << "Enter a section followed by the problem set:\n";
    cin >> ws;
    if (cin.peek() == '\n')
    {
        getline(cin, test, '\n');
    }
    while (!isdigit(cin.peek()))
    {
        if (!isdigit(cin.peek())) //assign string
        {
            test.push_back(cin.get());
        }
        if (isdigit(cin.peek()))
        {
            t = true;
        }
    }

    while (t == true) //assign array
    {
        if (!isdigit(cin.peek()))
        {
            if (cin.peek() == '-')
            {
                cin.ignore();

                if (isdigit(cin.peek()))
                {
                    cin >> temp_h;
                }
                temp_l = tarr[n-1];

                while (temp_h != temp_l)
                {
                    tarr[n] = temp_h;
                    temp_h--;
                    n++;
                }
            }
            if ((cin.peek() == ',') || (cin.peek() == ' '))
            {
                cin.ignore();
            }
        }
    }
}
```

```
    }
    if (isdigit(cin.peek()))
    {
        cin >> tarr[n];
        n++;
    }
    else
    {
        t = false;
        n=n-1;
    }
}

cout << "Do Problems: ";
temp_l = 0;
do
{
    if (temp_l >= 10)
    {
        cout << "\n";
    }
    cout << tarr[n] << ", ";
    n--;
    temp_l++;
} while (n != 0);
cout << " and " << tarr[n] << " of " << test<< "\n";

//system("pause");
return 0;

\033]0;g_butler4@mars:~/csc122\007[g_butler4@mars csc122]$ CPP Math.
\007You must supply me with at least one C++ file for this to work!

(Currently, this includes *.C and *.cpp...)

\033]0;g_butler4@mars:~/csc122\007[g_butler4@mars csc122]$ CPP Math.cpp
Math.cpp***
Math.cpp:92:2: warning: no newline at end of file

\033]0;g_butler4@mars:~/csc122\007[g_butler4@mars csc122]$ ./\033[KMath.out
Enter a section followed by the problem set:
list1,2,3
Do Problems: 3, 2, and 1 of list
\033]0;g_butler4@mars:~/csc122\007[g_butler4@mars csc122]$ ./Math.out
Enter a section followed by the problem set:
"test"2,3-6
Do Problems: 4, 5, 6, 3, and 2 of test"
\033]0;g_butler4@mars:~/csc122\007[g_butler4@mars csc122]$ ./\033[K\033[KMath.out
Enter a section followed by the problem set:
test2,3-6
Do Problems: 4, 5, 6, 7, 8, 3, and 2 of test
\033]0;g_butler4@mars:~/csc122\007[g_butler4@mars csc122]$ cat problems.tpq
cat: problems.tpq: No such file or directory
\033]0;g_butler4@mars:~/csc122\007[g_butler4@mars csc122]$ cat \033[Kproblems.tpq
Name: Gary Butler
For: CSCI22-002
Project:"You Want Me To Do What Problems?"(lab)
Levels Attempted:4(default)
Description:This program parses the cin buffer to find first the string to call the pr
oblem set, then the individual problems.
```

Q's and A's:

- 1.A string or char array both can hold one character or a bunch of text.
 - 2.You can check for one set of quotes, then parse till the next quote using getline or use .pushback untill a digit is found.
 - 3.While still in the buffer, quotes can be cin.ignore'd. Otherwise they can be examined and discarded from a string.
 - 4.While there are already values in the array, new values can be sorted in front of or behind these existing values.
 - 5.Use a temp value that follows the used spaces of the int array to avoid duplicates.
 - 6.A temp variable can be used to track every 10 or so outputs and sets a newline after 10 problems have been cout'd.\033]0;g_butler4@mars:~/csc122\007[g_butler4@mars csc122]
- ```
$ exit
exit
```

Script done on Sat 05 Mar 2016 05:41:45 PM CST