

Practice Problems 4 - Using a Data Files

When using large sets of data, for many programs the data will be in a file instead of typing every number in one at a time.

Note:

- We can put items on any line, however, we should use a format that makes it easy to read.
- Make sure you echo your input in the output.
- You can name your data file anything, but using a standard naming convention makes it easier to keep track of your files

(Using a data file is MANDATORY for this assignment. You will not receive any credit if you do not have your own data file.

Filename: pp4a.cpp and data file pp4a.data

Write a program that will read in a list of numbers and double each number. Your program should work for any number of lines of data.

Enter the Program

```
$ vi pp4a.cpp
```

```
#include <iostream>
using namespace std;
int main()
{   int num, numd;

    while (cin>>num)
    {
        numd = num * 2;
        cout <<num<<" doubled is "<<numd<<endl;
    }

    return 0;
}
```

```
$ c++ pp4a.cpp
```

```
$ vi pp4a.data
```

```
10 20 50 35 20 10
```

```
$ ./a.out < pp4a.data
```

Filename: pp4b.cpp and data file pp4b.data

Write a program that will read in 2 numbers per line and print the sum. Your program should work for any number of lines of data. You should create a data file of at least 20 lines.

\$ vi pp4b.cpp

```
#include <iostream>
using namespace std;
int main()
{   int num, num2, sum;

    while (cin>>num>>num2)
    {
        sum = num + num2;
        cout <<num<<" plus "<<num2<<" is "<<sum<<endl;
    }

    return 0;
}
```

\$ c++ pp4b.cpp

\$ vi pp4b.data

10 20

50 35

20 10

30 500

\$./a.out < pp4b.data

Filename: pp4c.cpp and data file pp4c.data

Write a program that will read in 4 test scores per line. Print the total number of points earned, your program should work for any number of lines of data.

*Create a data file of at least 10 lines

