In this assignment you will write a program that will multiply two integer matrices. The data for the matrices will be provided at the command line in the form of two files. You must display an error if the correct number of arguments is not provided and a different error if either of the files cannot be opened.

If the files can be opened, they are guaranteed to contain a valid matrix as shown in the example below with whitespace-separated values such that neither dimension is greater than 10. If it is not possible to multiply the matrices together (i.e. the # of columns in the first matrix is not equal to the # of rows in the second matrix) then you should display an error. If it is possible to multiply the matrices together, do so and output the result formatted such that each value output is right-aligned and padded such that it takes up 8 spaces.

You may write whatever functions you like, but one function must conduct the matrix multiplication as indicated by either of these function prototypes:

- `void display_product(ostream &, int [,][10], int [,][10], /* other parameters here as necessary */);` to multiply the two matrices and output them to the `ostream` you've passed to the function (likely `cout`)
- `void calculate_product(int [,][10], int [,][10], int [,][10], /* other parameters here as necessary */);` to multiply the first two matrices passed and store the result in the third matrix passed, which can then be output later (likely in `main`)

See the example output on the next page.
ls
a14.cpp data1 data2 data3

```
cat data1
1  2  3
4  5  6
```

cat data2
7  8
9  10
11 12

cat data3
1  2  3  4  5
6  7  8  9  10
11 12 13 14 15
16 17 18 19 20
21 22 23 24 25

```
g++ -Wall -Werror -Wpedantic -Wextra -std=c++11 a14.cpp
```

```
./a.out
Error, must provide exactly two arguments!
```

```
./a.out data1
Error, must provide exactly two arguments!
```

```
./a.out data1 data2 data3
Error, must provide exactly two arguments!
```

```
./a.out fakefile1 fakefile2
Error, file could not be opened!
```

```
./a.out data1 data2
   58   64
  139  154
```

```
./a.out data1 data3
Error: Matrices cannot be multiplied!
```

```
[williams@bobby 14]$ 
```