Programming Assignment 5

And why it was stupid

The test cases that Mimir used when testing submitted programs are deeply flawed. They do not follow the very format that Professor Douglas Miller had specified. They also included empty lines filled with garbage data. Thankfully it was easy to modify my program to tell me about the file being used to test

```
MIMIR INPUT FILE:
LINES: 6
0,0,0
1,2,3
0,0,00,0,00,0,00,0,0

```

Test Case 1

```
MIMIR INPUT FILE:
LINES: 7
0,0,0
0.33,0.33,0.33
0,0,00,0,00,0,00,0,00,0,00,0,0

```

Test Case 2

```
MIMIR INPUT FILE:
LINES: 12
0,0,0
0.707,0.707,0
0,0,0
0.707,0.707,0
0,0,00,0,00,0,00,0,00,0,00,0,00,0,00,0,00,0,00,0,0

```

Test Case 3

```
MIMIR INPUT FILE:
LINES: 12
0,0,0
1.414,0,1.414
0,0,0
1.414,0,1.414
0,0,00,0,00,0,00,0,00,0,00,0,00,0,00,0,00,0,00,0,0

```

Test Case 4

```
MIMIR INPUT FILE:
LINES: 12
0,0,0
0,2.828,2.828
0,0,0
0,2.828,2.828
0,0,00,0,00,0,00,0,00,0,00,0,00,0,00,0,00,0,00,0,0

```

Test Case 5

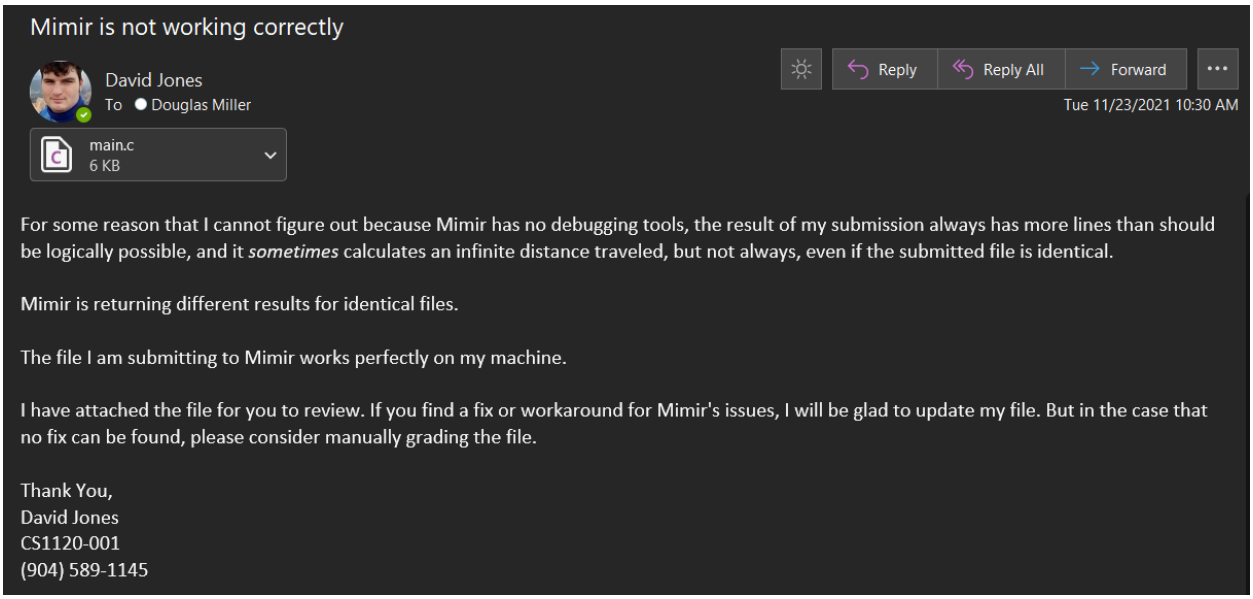
This is the information on each of the test cases, they should follow a simple format

```
float,float,float\n

float,float,float\n

float,float,float\n

. . .
```

However, they clearly deviate on their last line, with a plethora of zeroes following without any newlines to be seen. Also notice that the line count displayed above their information is incongruent with the actual lines presented. This is where the junk data comes from.

Please note that each test case actually has 2, 2, 4, 4, 4 lines, respectively.

On the original due date, I reached out to Douglas Miller for assistance with this issue. To this day I have not gotten a response, I have also made a post in teams without any response. I have included a screenshot of the email here:



Fortunately, I have been able to make my program work, with a little bit of hardcoding. Because I know the ACTUAL INFORMATION of the test files, I can work around their idiosyncrasies.

I am grateful that Douglas Miller has chosen to extend the due date of this assignment, however in his message he stated that we should “make an earnest effort to reach out for assistance if you need it.” It would seem hypocritical then, that he would be radio silent before and since this message as my own email to him predates this quote.

Solution:

The problem rests in the number of lines in the files being submitted. Because we now know how many lines each file has, and should have, we can correct for this.

```
// create a different variable to store actual number of lines
// we will test against this variable in the following switch statement
int protoLines = countInputFileLines(POINTS_FILE);
int numLines;
// workaround for mimir nonsense
switch (protoLines) {
	// Check for each of the different number of lines
	// and assign numLines the correct values that fit in the code
	// the values i assign them to is based on how my code will work
	// I included a default case just in case something doesn't quite hit
	case 6: numLines = 3; break; // case 1
	case 7: numLines = 3; break; // case 2
	case 12: numLines = 5; break; // case 3, 4, & 5
	default: numLines = countInputFileLines(POINTS_FILE) / 2; break;
}


// one thing to keep in mind is the call to the printFileContent function
// in the default call to this function provided by the instructor
// the numLines parameter includes a '- 1' in it. I chose to keep it this way
// this is why I assign my number of lines to be +1 the number of output lines
```

I hope that this little solution has helped, though it is entirely unnecessary, because if the test cases in Mimir actually fit the assignment description this would not be an issue. It should also be noted that our **professor** did not provide assistance when I asked for it.