

MPI Scatter/Gather Lab Files

From Education

Input Test Files

- small.txt (<http://wiki.sc-education.org/images/a/a4/Small.txt>)
- medium.txt (<http://wiki.sc-education.org/images/c/c4/Medium.txt>)
- therealdeal.txt (<http://wiki.sc-education.org/images/1/14/Therealdeal.txt>)

Input.c

```
#include <stdio.h>
#include <stdlib.h>

int main(int argc, char ** argv) {
    FILE *filePtr;
    int const LINE_LENGTH = 15;
    char charNum[LINE_LENGTH];
    int numValues, x;

    filePtr = fopen(argv[1], "r");
    fgets(charNum, LINE_LENGTH, filePtr);
    numValues = atoi(charNum);
    int values[numValues];

    for (x = 0; x < numValues; x++) {
        fgets(charNum, LINE_LENGTH, filePtr);
        values[x] = atoi(charNum);
    }

    fclose(filePtr);

    for (x = 0; x < numValues; x++) {
        printf("x[%d] = %d\n", x, values[x]);
    }
}
```

Kay's Solution