

```

1  /*-----+
2  File Name: readDate.c
3  +-----+
4
5  +-----+
6  Programming III COP4338
7  Author: Daniel Gonzalez P#4926400
8  assignment 5: Date Validate / Format
9  Date: 11/08/2016 ELECTION DAY!!!!
10
11  program description
12      Input: Accept input for the first program via the command-line arguments.
13              Input will be the number of valid entries to be redirected from
14              the dates input file (dates.dat). A zero indicates to input all
15              entries from the dates input file. Your program should validate
16              (day, month & year - see page 111 for validation ideas) and skip
17              corrupt dates in the dates.dat file (see page 159 for scanning
18              ideas). This validated input will then be piped out to the
19              second program.
20              The second program will accept these validated dates in the
21              month/day/year format and convert each of them to the day,
22              abbreviated month & year format - both exhibited above. The
23              abbreviated month should consist of the first three letters of
24              the month, capitalized. These converted results will be redirected
25              to the output file (output.dat), followed by a copy of the
26              original (dates.dat) data.
27
28      Output: Generates an output file (output.dat) that contains a
29              converted list of dates in day, abbreviated month & year
30              format (i.e. 1 JAN 1900), followed by the original list of
31              dates in month/day/year format (i.e. 1/1/1900). This output file
32              will be the result of appending the input file (dates.dat), which
33              is accessed by the first program, with the result output file
34              (output.dat), generated by the second program.
35
36
37  +-----+
38  | I Daniel Gonzalez #4926400 hereby certify that this collective work is |
39  | my own and none of it is the work of any other person or entity.      |
40  +-----+
41
42
43  how to compile and execute:
44      1.Open the terminal
45          Go to the program folder that contains all the files required for
46          the program to compile including all header files(*.h).
47          Run the following command "make"
48
49      2.Open the terminal
50          Go to the program folder that contains all the files required for
51          the program to compile including all header files(*.h).
52          COMPILER: "gcc -Wall -w -lm readDate.c dateValidate.c -o validateDate"
53
54  Program execution:
55  From the terminal enter:
56      "./validateDate < dates.dat [X] | ./format > output.dat"
57
58      X: is the amount of validated dates
59
60
61
62
63  +-----*/
64
65  #include "general.h"
66
67
68
69  /**-----+

```

```

70 //Get a line of data.
71 //Validate the line.
72 //Print data with correct format.
73 //Write out the formatted data.
74 //If error enabled then write the error.
75 //Write out the original data.
76 */
77 int main(int argc, char *argv[])
78 {
79
80     /* Declare variables */
81     LineList inputLines;
82     DateKey date;
83     Data data;
84     Boolean processAll = FALSE;
85
86     /* Initialize variables */
87     initializeLineList(&inputLines);
88
89     /* Input values */
90     int maxLines = (argc == MAX_AMOUNT_ALLOWED_ARGS) ? atoi(argv[1]): 0;
91     if (maxLines == 0){
92         processAll = TRUE;
93     }else{
94     }
95
96     /* Main process */
97     while ((fgets(data.input, MAX_LINE, stdin) != NULL) &&
98         (maxLines > 0 || processAll)) {
99
100         date = getDateKeys(data.input);
101         if(date.error == NO_ERRORS){
102             printfDate(data.output, DATE_FORMAT_SLASH, &date);
103             fputs(data.output, stdout);
104
105             maxLines--;
106
107         }else{
108             if(ENABLE_ERROR){
109                 printError(data.error, data.input, date.error);
110             }else{
111             }
112         }
113
114         appendToLineList(&inputLines, data.input);
115     }
116
117     fputc(HAND_SHAKING_SIGNAL, stdout);
118
119     fprintf(stdout, "\n\n%s\n", LB_ORIGINAL_DATA);
120     int i = 0;
121     for(i = 0; i < inputLines.size; i++){
122         fputs(inputLines.lines[i].content, stdout);
123     }
124
125     freeLineList(&inputLines);
126
127     /* Output results */
128     return NO_ERRORS;
129 }

```