CS 221 C and Systems Programming
Assignment 6

Due at 11:59 on October 30, 2015
Submit your source code to `Canvas` before 11:59 p.m. on the due date.

1 Standard Input/Output Formatting (40 marks)

Write a program that reads a date from the `stdin` (keyboard) and displays it on `stdout` (screen) in the following form:

    September 13, 2010

Allow the user to enter the date as either `9-13-2010` or `9/13/2010`; you may assume that there are no spaces in the date. Print an error message if the date does not have one of the specified forms. Name your program file `date.c`.
Use the following phone numbers to test your code:

- `4.17.1999` // invalid form

- `(3) 27-1998` // invalid form

- `5-17-2008` // May 17, 2008

- `4/7/1999` // April 7, 1999

- `4/7/1999/` //April 7, 1999

- `March 7 2015` // invalid form

2 File Input/Output Formatting (60 marks)

Write a program that reads a series of phone numbers from a file and then writes them in a standard format to a different file. Each line of the input file contains a single phone number, but the numbers may be in a variety of formats. You may assume that each line contains 10 digits, possibly mixed with other characters (which should be ignored). For example, suppose that the file contains the following lines:

    404.817.6900
    (215) 866-1776
    312-746-6000
    877 275 5273
    6173434200

The output of the program should have the following appearance:

```
(404) 817-6900
(215) 866-1776
(312) 746-6000
(877) 275-5273
(617) 343-4200
```

Have the program obtain the input and output file names from the command line. In addition to the phone numbers in `input.txt`, you program needs to handle the following test cases:

- If no file name is provided, print an error message and exit the program.

- if one file name is provided, treat the name as input file and use `output.txt` as the output file name.

- if two file names are provided, treat the first file name as input file and the second file name as output file.

- if the input file can not be opened, print an error message and exit the program.

Name your program file `phones_file.c`.