Introduction to Scientific Computing Example

Strings

1. Download and save the file `flightdata.txt`. This file contains data for a set of rather unique flights from 'Global Airlines Inc'. Data includes passenger number, name, airline, destination, flight number and both departure and boarding times. Write a program that reads in this data, identifies the different data elements, and displays it tidily (see suggested outline below). You should process both passenger and flight entries.

   - *Hints*:
     (a) There's actually no need to store the data in an array of strings: just read, process and overwrite
     (b) Try using `fgets` to read a line from the file and then `sscanf` to process that line

```
*** PASSENGER 50 ***
Name:         Ferdinand Zeppelin
Airline:      Hamburg International
Time:         11 00
Destination:  Frankfurt International
Flight num:   HH202
Gate:         2
Boarding:     10 00

*** FLIGHT AA101 ***
Gate:         4
Time:         7 30
```

2. Modify your program to allow the user to specify a passenger number for which you will create a text file, 'boardingpass.txt'. This file should include all the data related to that passenger, neatly formatted and presented in the form of a boarding pass. You will need to relate boarding time through the flight number for the passenger requested. Take your time to present the information requested neatly and logically (see suggested outline below).

```
*** PASSENGER 50 ***
Name:         Ferdinand Zeppelin
Airline:      Hamburg International
Time:         11 00
Destination:  Frankfurt International
Flight num:   HH202
Gate:         2
Boarding:     10 00
```