

Homework #2

Course: COP 3223C

Semester: Spring 2016

Due Date: February 10, 2016

Credit Value: 5% of final grade

Basic input and output

You love to travel, but hate to fly ... really hate to fly! The longer you are on an airplane, the less comfortable you become. Actually, most people do too, but you become particularly uncomfortable, on an exponential basis. So, in order to know how long flights are, you build a computer program that for a handful of cities and aircraft types, it will tell you the duration of the flight in hours and minutes. So, use Code::Blocks to write and execute the following simple program:

Write a program that requests from the user the name of the city to which she/he wants to fly. The user then enters a character or a string indicating the name of the city, and the type of aircraft to be flown, and the program calculates and prints out the flight time based on the distance of that city to Orlando and the speed of the chosen airplane.

For the purpose of our program here, you will use the following cities:

New York
Paris
London
Rome
Frankfurt
San Francisco
Tokyo
Havana

Search the web (Google Maps?) and find the distances between these cities and Orlando. Cite the sources on comment lines.

Of course, the speed of the airplane also matters, so you will be able to also enter the type of airplane on which you will be traveling. Then the program will ask the user what kind of airplane he/she will be flying. For the purposes of this program, use the following aircraft:

Boeing 747
Boeing 777
Airbus A330
Airbus A380
Concorde

Search the web for the cruising airspeed of these aircraft, and cite the sources in comment lines.

Make the output friendly. It should state the entire set of inputs and the output, for example,

```
The flight time between Orlando and Paris on a Boeing 777 will be
9 hours and 20 minutes.
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You can use either strings (Paris) or characters (p) to input the name of the city and aircraft. You **must** use preprocessor directives (#define) to define the constant values of the distances and speeds.