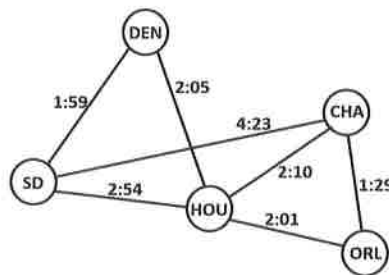


6. Isha

Program Name: Isha.java

Input File: isha.dat

Way Cool Software Development Corporation has recently hired Isha as a junior software engineer. Their newest client is FastFlights Airlines. FastFlights is just getting started so they only fly to a few cities in the United States. Those cities are Charlotte, North Carolina, Orlando, Florida, Houston, Texas, Denver, Colorado and San Diego, California. FastFlights has asked Way Cool to create a program that will determine the arrival time for each of their flights that accounts for changing time zones. Charlotte and Orlando are in the eastern time zone. Houston is in the central time zone. Denver is in the mountain time zone and San Diego is in the pacific time zone. There is a one hour difference between each time zone. For example, when it is 11:00 A.M. in Orlando it is 8:00 A.M. in San Diego. A diagram that shows Fast Flights various flights and the flight times for each flight is shown here:



Isha has been assigned the job of writing this program. What will her program look like when it is done?

Input: A number N representing the number of flights. N lines of data each containing the departure city, departure time and destination city. A.M. and P.M. will always be capitalized and contain periods. Consider midnight as 12:00 A.M. and noon as 12:00 P.M.

Output: The departure city and local departure time followed by the destination city and the local arrival time for each flight listed in the input data. Times should be formatted such that single digit hours are shown without a leading zero but single digit minutes should be shown with a leading zero.

Sample input:

```

3
Houston 6:00 A.M. Orlando
Orlando 1:25 P.M. Charlotte
Charlotte 7:30 A.M. San Diego
    
```

Sample output:

```

Houston 6:00 A.M. Orlando 9:01 A.M.
Orlando 1:25 P.M. Charlotte 2:54 P.M.
Charlotte 7:30 A.M. San Diego 8:53 A.M.
    
```