



# Challenge 4: Trace the Complete Path of a Journey

Test your knowledge on hash table traversal with this coding exercise!

We'll cover the following ^

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#### Problem Statement #

You have to implement the trace\_path() function which will take in a list of source-destination pairs and return the correct sequence of the whole journey from the first city to the last.

### Input #

A Python dict containing string pairs of source-destination cities.

### Output #

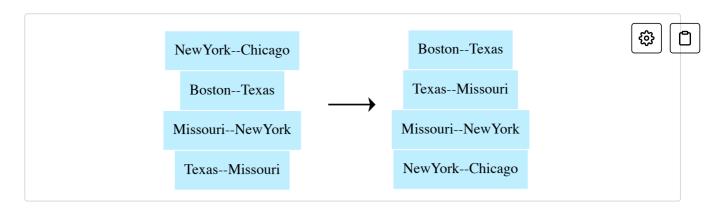
A list of source-destination pairs in the correct order.

# Sample Input #

```
dict = {
  "NewYork": "Chicago",
  "Boston": "Texas",
  "Missouri": "NewYork",
  "Texas": "Missouri"
}
```

## Sample Output #

```
[["Boston", "Texas"] , ["Texas", "Missouri"] , ["Missouri", "NewYork"] , ["NewYork", "Chicago"]]
```



# Coding Exercise #

Design a step-by-step algorithm first before jumping on to the implementation. Think about how you can model this to hash tables.

If you get stuck, you can always refer to the solution.

#### Good luck!

