

40. Destination City

You are given the array paths, where paths[i] = [cityAi, cityBi] means there exists a

direct path going from cityAi to cityBi. Return the destination city, that is, the city

without any path outgoing to another city.

It is guaranteed that the graph of paths forms a line without any loop, therefore, there will

be exactly one destination city

Code:

```
def destCity(paths):  
    outgoing = set(cityA for cityA, cityB in paths)  
    for cityA, cityB in paths:  
        if cityB not in outgoing:  
            return cityB  
paths = [["London", "New York"], ["New York", "Lima"], ["Lima", "Sao Paulo"]]  
print(destCity(paths))
```

Output:

```
= RESTART: C:\U  
Sao Paulo
```

Time Complexity:

- $T(n) = O(1)$