Assignment 4

TSP Problem

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Report

In this assignment, I use greedy algorithm to create my own TSP solution about the cities where Hemingway lived. Choice function, the colorful life of Hemingway, how to use code in greedy algorithm are what I learned in assignment 4.

Firstly, to find the cities where Hemingway lived and distance between these cities, I went to Wikipedia and was shocked that Hemingway traveled to so many places. It was an outstanding achievement although he only chose to live in Oak Park, Paris, Milano, Toronto, Chicago, Key west, Havana, Vence, Entebbe, New York and Ketchum. Colorful life, vigorous vitality and strong will did impress me and I gained power from his experience.

Then I practiced choices function from random library. Choices is such a powerful tool that can create any random results in given list. This function is only used to find a random city but it will be more important in those assignments from my probability classes.

Thirdly, creating code used to be the hardest part for me since I never used python before this program. However, code didn’t block me in this assignment although I had to fix two bugs from the dictionary about the distance between every two cities and the range function in the ‘for loop’. It was a great achievement which proved my hard work about python in the last three weeks. After finishing the main codes, I practiced input() function and defining function skills while creating code to ask for a start city.

Finally, I got the best solution by comparing every city as start city. Entebbe as a start city is the best solution since the total distance (19312 km) is shortest in this case.