**PROBLEM 6**

Shortest path in Alabama

Write a program to find the shortest routing and distance between two Alabama cities using the following distance table.

You are not allowed to use any other manually computed distances in your program.

Alabaster-Birmingham 24 miles  
Alabaster-Montgomery 71 miles  
Birmingham-Huntsville 103 miles  
Birmingham-Tuscaloosa 59 miles  
Demopolis-Mobile 141 miles  
Demopolis-Montgomery 101 miles  
Demopolis-Tuscaloosa 65 miles  
Mobile-Montgomery 169 miles  
Montgomery-Tuscaloosa 134 miles

**Example 1:**  
Enter city #1: Demopolis  
Enter city #2: Birmingham  
Shortest routing and distance:  
Demopolis-Tuscaloosa-Birmingham, 124 miles

**Example 2:**   
Enter city #1: Mobile  
Enter city #2: Huntsville  
Shortest routing and distance: Mobile-Montgomery-Alabaster-Birmingham-Huntsville, 367 miles