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CS302.1001
Project 6
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To Compile and Run: Enter folder named “PA06_RyanHoffman” and type “make”.

Notes: I used total miles to the destination as my cost as then converted to gas mileage at the end of the program.

Possible paths from Reno to visit all other vertices:

1. Reno->San Francisco->Salt Lake->Seattle->Vegas Total Mileage: 2919
2. Reno->San Francisco->Salt Lake->Vegas->Seattle Total Mileage: 2500
3. Reno->San Francisco->Seattle->Salt Lake->Vegas Total Mileage: 2287
4. Reno->San Francisco->Seattle->Vegas->Salt Lake Total Mileage: 2572
5. Reno->San Francisco->Vegas->Salt Lake->Seattle Total Mileage: 2047
6. Reno->San Francisco->Vegas->Seattle->Salt Lake Total Mileage: 2751

7. Reno->Salt Lake->San Francisco->Seattle->Vegas Total Mileage: 3187
8. Reno->Salt Lake->San Francisco->Vegas->Seattle Total Mileage: 2947
9. Reno->Salt Lake->Seattle->Vegas->San Francisco Total Mileage: 2734
10. Reno->Salt Lake->Seattle->San Francisco->Vegas Total Mileage: 3051
11. Reno->Salt Lake->Vegas->San Francisco->Seattle Total Mileage: 2315
12. Reno->Salt Lake->Vegas->Seattle->San Francisco Total Mileage: 2872

13. Reno->Seattle->San Francisco->Salt Lake->Vegas Total Mileage: 2669
14. Reno->Seattle->San Francisco->Vegas->Salt Lake Total Mileage: 2501
15. Reno->Seattle->Salt Lake->San Francisco->Vegas Total Mileage: 2848
16. Reno->Seattle->Salt Lake->Vegas->San Francisco Total Mileage: 2533
17. Reno->Seattle->Vegas->San Francisco->Salt Lake Total Mileage: 3133
18. Reno->Seattle->Vegas->Salt Lake->San Francisco Total Mileage: 2986

19. Reno->Vegas->San Francisco->Salt Lake->Seattle Total Mileage: 2583
20. Reno->Vegas->San Francisco->Seattle->Salt Lake Total Mileage: 2655
21. Reno->Vegas->Salt Lake->San Francisco->Seattle Total Mileage: 2404
22. Reno->Vegas->Salt Lake->Seattle->San Francisco Total Mileage: 2508
23. Reno->Vegas->Seattle->San Francisco->Salt Lake Total Mileage: 3108
24. Reno->Vegas->Seattle->Salt Lake->San Francisco Total Mileage: 3140

Best path selected by algorithm:

5. Reno->San Francisco->Vegas->Salt Lake->Seattle Total Mileage: 2047

