How to Run the Code:

To run our code, the user needs to input the capacity. Our code will check for the inappropriate input for capacity and if it does not meet the requirement, it will ask the user to input the correct value.In our program, we have included all three examples under the main section. The first example is ready to be run; however, to test the second and third example, the user needs to remove the comments and put the first graph as a comment. Everything is already typed, the user needs to put # before each line of the first graph and remove the # from the second or third graph. We designed our code such that the user needs to input the appropriate capacity.

Steps for running the code:

1) Pull the Python (.py) file from the main branch on github and open the file. You can open the file in a text editor or IDE.

2) Open the command prompt

3) Find the .py file by searching for it in the command prompt. For example, your file location may be in C:\Users\Desktop\Algorithms\Project1

4) Once you've found the location, run the .py file by typing (the filename).py and hitting enter. In this case, the file name is SavyTraveler.py

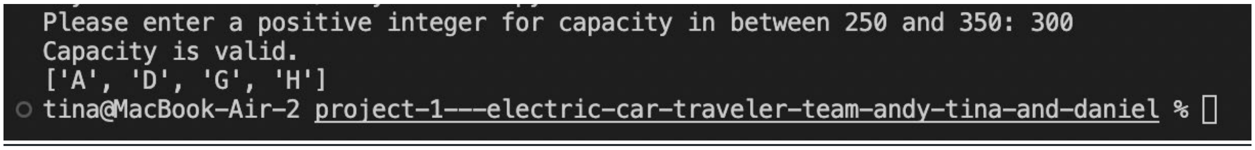
Pseudocode:

```
def shortest_path (graph, full_capacity, current_capacity, destination, result, previous)

    return_capacity = 0
     for edge in graph:
          next_city = edge
          distance = edge
          previous[current] = distance
          current_capacity = current_capacity - distance
          return_capacity = current_capacity  - previous[current]

        if return_capacity <= 0:
             result.append(current_city)
             current_capacity = full_capacity
        end if
```

```
            next_city = current_city

           elif current_capacity <= 0:
                result.append(current_city)
                current_capacity = full_capacity
          end elif

         if next_city == destination:
            result.append(next_city)
            print(result)
            return
         end if
       shortest_path (graph, full_capacity, current_capacity, next_city, destination,  result, previous)

end for
```

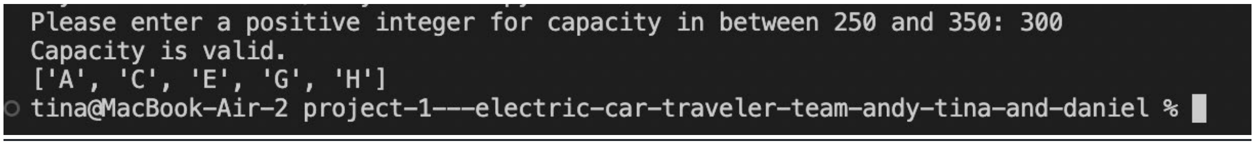
Output Examples:

Example 1 Output:



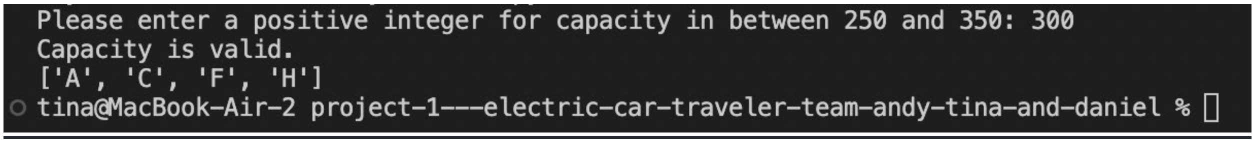
```
  Please enter a positive integer for capacity in between 250 and 350: 300
  Capacity is valid.
  ['A', 'D', 'G', 'H']
○ tina@MacBook-Air-2 project-1---electric-car-traveler-team-andy-tina-and-daniel % ▯
```

Example 2 Output:



```
 Please enter a positive integer for capacity in between 250 and 350: 300
 Capacity is valid.
 ['A', 'C', 'E', 'G', 'H']
○tina@MacBook-Air-2 project-1---electric-car-traveler-team-andy-tina-and-daniel % █
```

Example 3 Output:



```
  Please enter a positive integer for capacity in between 250 and 350: 300
  Capacity is valid.
  ['A', 'C', 'F', 'H']
○ tina@MacBook-Air-2 project-1---electric-car-traveler-team-andy-tina-and-daniel % ▯
```