```
1 /Users/bmalapat/Documents/GitHub/pythonProject/venv
  /bin/python /Users/bmalapat/Documents/GitHub/
   pythonProject/main.py
 2 Ant Colony Optimization - TSP Bays29
 3
 4 Running ACO with the following parameters:
 5
 6 population: 15
 7 pheromone decay constant: 0.01
8 online pheromone update: True
 9 alpha: 1
10 beta: 5
11 Q: 2000
12 max iterations: 500
13
14 Ant Colony Construction in Progress...
15
16 Initial Tour Cost: 21683.265726542908
17 Iterations Completed: 100
18 Iterations Completed: 200
19 Iterations Completed: 300
20 Iterations Completed: 400
21
22 Best Tour Found by ACO for Bays29:
23 [11, 22, 17, 18, 14, 15, 4, 10, 20, 2, 21, 5, 26,
   29, 3, 9, 6, 12, 28, 1, 8, 16, 27, 24, 13, 19, 25,
   7, 23]
24 Cost of Best Tour is 8914.261491363937 found at
   Iteration 435 by an Ant
25 Running ACO with the following parameters:
26
27 population: 15
28 pheromone decay constant: 0.999
29 online pheromone update: True
30 alpha: 1
31 beta: 5
32 Q: 2000
33 max iterations: 500
34
35 Ant Colony Construction in Progress...
36
```

```
37 Initial Tour Cost: 21467.086319047314
38 Iterations Completed: 100
39 Iterations Completed: 200
40 Iterations Completed: 300
41 Iterations Completed: 400
42
43 Best Tour Found by ACO for Bays29:
44 [3, 29, 26, 5, 9, 6, 12, 28, 1, 21, 2, 20, 10, 4,
   15, 14, 18, 17, 22, 11, 25, 19, 16, 13, 24, 8, 27,
   23, 7]
45 Cost of Best Tour is 8377.482194033171 found at
   Iteration 82 by an Ant
46
47 Process finished with exit code 0
48
```