```
Estações: 1, Total Cost: 1078.5714285714287, Average Travel Cost: 0.7857
142857142857, Stations: {(2, 2)}, Time: 0.01s, Gerações: 2, Avaliações:
10
 0  7  0  0  4
 0  0  0  4  0
 1  0  0  0  0
 4  4  1  0  0
 6  0  3  4  4
```

```
Estações: 1, Total Cost: 1077.5510204081634, Average Travel Cost: 0.7755
102040816326, Stations: {(2, 2)}, Time: 0.01s, Gerações: 2, Avaliações:
10
 4  0  0 10  1
 1  0  0  0  0
 0  0  1  6  3
 0  4  0  0  2
 8  0  6  3  0
```

```
Estações: 1, Total Cost: 1103.658536585366, Average Travel Cost: 1.03658
53658536586, Stations: {(2, 3)}, Time: 0.03s, Gerações: 2, Avaliações: 2
6
 0  8  0  4  5 10  0
 0  4  0  7  0  4  0
 0  2  4  2  0  0  2
 0  7  0  1  2  0  0
 2  4  0  0  3  0  2
 0  4  0  0  3  0  0
 2  0  0  0  0  0  0
```

```
Estações: 1, Total Cost: 1121.3483146067415, Average Travel Cost: 1.2134
831460674158, Stations: {(3, 4)}, Time: 0.03s, Gerações: 2, Avaliações:
26
 0  0  1  0  7  0  1
 0  1  4  0  0  0  4
 0  0  0  0  2  0  0
 3  1  0  8  5  7  7
 0  4  0  3  0  0  0
 0  0  0  3  2  4  2
 0  8  3  6  3  0  0
```

```
Estações: 1, Total Cost: 1236.9942196531792, Average Travel Cost: 2.3699
421965317917, Stations: {(4, 3)}, Time: 0.08s, Gerações: 2, Avaliações:
50
  6  7  2  0  0  0  0  0  0
  3  3  6  0  8  4  3  1  0
  0  0  8  0  0  0  2  4  0
  0  0  0  1  0  3  2  0  0
  0  0  0  7  4  0  1  0  0
 12  8  0  5  4  1  4  3  4
  8  0  1  2  4  3  3  0  0
  1  1  0  0  0  0  5  0  0
  4  0  0  0  4  6  0 13  2
```

```
Estações: 1, Total Cost: 1233.3333333333333, Average Travel Cost: 2.3333
333333333335, Stations: {(5, 4)}, Time: 0.05s, Gerações: 2, Avaliações:
50
  0  0  0  0  0  0  0  0  0
  4  0  8  4  0  0  0  0  0
  0  0  0  0  0  0  0  0  0
  0  0  0  0  3  0  0  1  0
  0  3  0  0  0  0  0  0  0
  0  0  0  1  1  0  0  3  0
  0  0  2  4  0  0  0  1  0
  0  2  0  0  8  0  4  3 10
  0  0  3  0  0  4  0  0  0
```

```
Estações: 2, Total Cost: 2204.972375690608, Average Travel Cost: 2.04972
37569060776, Stations: {(7, 6), (4, 3)}, Time: 2.21s, Gerações: 21, Aval
iações: 1431
  0  0  0  0  0  3  0  0  0  0  0
  0  0 11  2  0  0  9  3  0  0  3
  0  0  0  3  1  0  2  0  0  0  0
  4  1  2  3  0  4  0  0  4  0  0
  5  0  0  0  4  0  1  0  4  3  0
  0  0  0  7  4  0  1  0  0  7  0
  0  8  0  0  0  0  3  0  1  0  3
  0  3  0  0  5  2  3  0  0  0  2
  0  0  0  3  1  0  2  8  0  0  0
  0  3  4  0  7  0  0  7  0  0  0
  4  2  0  4  0  3  0  0  5  7  0
```

```
Estações: 1, Total Cost: 1269.0721649484535, Average Travel Cost: 2.6907
216494845363, Stations: {(5, 4)}, Time: 0.06s, Gerações: 2, Avaliações:
82
 1  0  0  0  0  0  0  0  0  0  0
 0  0  0  0  0  0  0  0  0  0  0
 0  0 10 10  0  0  0  4  5  0  0
 0  4  1  0  8  0  0  0  0  0  5
 8  0  0  0  0  0  6  0  0  0  0
 0  0  0  0 13  0  0  0  2  0  3
 0  0  0  0  4  0  0  0  0  1  0
 0  0  0  0  0  0  0  0  0  0  0
 0  0  4  0  0  0  0  3  0  0  0
 4  1  0  0  0  0  0  0  0  0  0
 0  0  0  0  0  0  0  0  0  0  0
```

```
Estações: 3, Total Cost: 3229.220779220779, Average Travel Cost: 2.29220
7792207792, Stations: {(9, 10), (8, 3), (2, 8)}, Time: 9.93s, Gerações:
32, Avaliações: 3601
 2  4  0  0  6  7  3  4  0  0  3  0  1
 0  0  2  0  3  0  0  6  0  0  8 11  3
 0  3  0  8  0  0  2  0  0  0  0  0  4
 2  0  0  0  0  0  0  0  0  3  2  0  0
 0  6  0  8  0  3  0  0  0  0  0  0  1
 0  3  0  2  0  0  9  0  0  0  0  5  6
 1  9  4  0  0  2  4  0  0  0  3  2  0
 2  3  0  4  0  0  0  6  2  0  1  0  3
 0  0  0  0  0  6  0  0  0  2  2  0  8
 7  2  4  2  0  0  6  4  1  0  0  0  7
 0  0  0 11  0  0  0  0  3  4  0  9  0
 0  0  0  0  1  4  3  4  0  0  0  3 11
 0  0  4  7  7  0  0  2  0  2  5  0  1
```

```
Estações: 3, Total Cost: 3151.5337423312885, Average Travel Cost: 1.5153
374233128833, Stations: {(3, 7), (6, 2), (8, 9)}, Time: 22.15s, Gerações
: 99, Avaliações: 7827
 0  0  1  4  0  0  9  0  0  0 12  0  1
 0  0  0  0  0  0  0  0  0  1  0  0  0
 1  0  0  0  0  0  2  0  0  2  0  0  0
 0  0  0  0  0  9  4  0  0  0  6  0  0
 0  6  9  0  0  0  0  0  0  0  0  0  0
 0  0  0  0  0  0  0  1  6 10  0  1  4
 0  3  0  0  0  1  0  0  0  0  0  2  0
 0  0  0  1  3  0  0  0  0  9  0  0  0
 9  0  0  3  3  0  0  0  0  3  4  0  0
 0  1  4  0  0  0  0  0  0  5  0  1  0
 0  0  0  0  0  0  0  0  0  0  0  0  0
 2  0  0  0  0  3  3  0  0  0  0  0 10
 0  0  0  0  0  0  0  0  0  4  0  0  0
```

```
Estações: 3, Total Cost: 3200.0, Average Travel Cost: 2.0, Stations: {(9
, 6), (2, 10), (4, 3)}, Time: 17.42s, Gerações: 68, Avaliações: 7677
 0  0  0  4  0  0  0  6  0  0  0  0  2  2  0
 0  2 12  0  3  0  0  0  0 26  0  0  0  0  4
 0  0  0  0  0  0  0  0  0  0  0  0  2  2  0
 0  0  0  0  0  0  0  3  3  1  0  0  0  0  0
 0  0  0  0  0  1  3  0  0  6  4  0  0  0  0
 0  0  0  0  0  0  0  5  4  0  0  3  0  0  0
 9 12  0  0  0  4  1  6  0  0  0  0  0  0  0
 0  0  0  0  0  0  0  0  4  0  0  0  0  0  0
 0  3  0  0  0  2  0  0  0  7  0  4  0  0  0
 0  0  2  0  0  9  2  0  0  0  0  0  0  0  0
 0  2  0  0  2 16  0  8  0  2  0  0  0  0  7
 0  0  5  0  6  0  0  0  0  0  8  0  0  0  0
 0  4  0  0  0  0  0  0  1  2  3  0  0  0  0
```

```
Estações: 3, Total Cost: 3171.891891891892, Average Travel Cost: 1.71891
8918918919, Stations: {(9, 12), (9, 2), (3, 4)}, Time: 15.14s, Gerações:
 76, Avaliações: 8786
 0  0  0  0  0  0  0 10  3  0  0  0  0  2  0
 0  0  0  0  0  0  0  0  0  0  0  1  0  0  0
 0  1  0  3  0  0  0  0  4  0  0  0  4  0  0
 0  0  0 10  3  8 11  0  0  0  0  0  2  0  0
 0  4  0  0  0  0  0  0  0  0  0  2  0  0  1
 0  4  2  0  0  0  4  0  0  0  0  0  0  0  0
 0  0  0  0  0  0  0  5  0 10  0  0  1  0  0
 0  0  0  0  0  0  0  0  3  0  0  2  8  0 15
 0  1  0  0  0  0  0  0  0  0  0  0 11  0  0
 0  0  0  0  0  3  0  0  0  0  0  1  0  2  0
 0  0  0 11  0  0  0  0  0  0  0  0  0  0  2
 8  0  0  0  0  4  0  0  0  0  0  4  2  0  4
 0  0  0  0  0  0  0  0  0  0  0  0  0  8  1
```

```
Estações: 3, Total Cost: 3236.543209876543, Average Travel Cost: 2.36543
2098765432, Stations: {(8, 13), (3, 9), (9, 3)}, Time: 20.24s, Gerações:
 52, Avaliações: 7235
 0  0  0  3  0  0  0  0  5  0  0  0  0  0  0  0  0
 0  0  0  0  3  0  0  0  4  2  0  3  0  0  0  0  0
 6  0  3  0  0  0  6  0 30  0  1  8  6 10  0  0  0
 0  7  0  1  4  0  0  1  0  0  0  0  0  0  4  4
 0  2  0  0  1  0  0  0  0  0  0  0  0  0  0  0  3
 0  8  0  0  0  0  0  3  0  0 36  0  1  0  0  2  0
 6  0  0  0  8  2  8  0  0  2  0  0  0  0  0  0  0
 8  1  0  0  0  0  4  1  0  0  0  0  0  6  7  0  0
 3  5  0  0  0  0  0  0  0  0  5  0  0  4  0  0  1
 3  0  0  2  0  4  0  0  0  0  9  0  0  0  8 16 24
 0  1  0  0  1  1  0  0  2  0  0  0  0  0  6  1  0
 0  3  4  0  3  4  0 10  0  0  0  0  5  5  8  4  4
 8  0  0  0  0  0 17  0  0 10  0  2  0  0  2  0  0
```

```
Estações: 3, Total Cost: 3214.6739130434785, Average Travel Cost: 2.1467
391304347827, Stations: {(8, 3), (3, 5), (8, 12)}, Time: 33.05s, Geraçõe
s: 110, Avaliações: 12615
 0  0  0 10  0  0  0  0  0  0  0  0  0  0  0  0  0
 0  0  0  0  0  0  0  0  0  0  0  0  1  4  0  0  0
 0  6  0  0  0  0  8  0 10  0  0  0  0  2  2  3  0
 0  0  0  0  0  4  0  8  3  0  0  0  0  0  0  0  0
 0  0  0  0  4  0  0  0  0  0  0  0  0  0  0  0  0
 4  0  8  1  0  0  7  0  0  0  0  0  5  3  0  0  0
 0  0  3  0  1  0  0  3  0  0  3  0  3  0  8  0  0
 0  0  0  0 11  0  0  0  0  0  0  0  0  0  0  1  0
 0  6  0  0  0  0  0  1  0  2  0  1  0  0  0  0  0
 0  0  2  0  1  3  0  1  0  4  0  0  6  0  0  0  0
 0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1  0
 4  8  0  0  0  0  0  0  0  0  2  0  0  0  0  0  0
 4  0  0  0  0  0  0  0  0  0  0  0  3  0  0  6  3
```

```
Estações: 3, Total Cost: 3264.43661971831, Average Travel Cost: 2.644366
1971830985, Stations: {(10, 4), (2, 5), (4, 14)}, Time: 20.73s, Gerações
: 35, Avaliações: 5858
 0  0  0  0  4  0  0  4  0  0  8  0  6  0  0  0  0  0  4
 0  0  0  0  0  2  0  6  0  0  0  0  0  0  0  0  0  3  1
 2  0  8  3  0  0  0  5  0  4  0  0  0  0  0  2  1  4  0
 0  0  1  0  4  0  0  0  0  0  0  1  0  0  0 18 10  0  0
 0  0  1  0  0  0  0  3  0  2  0  0  0  7  4  0  0  4  3
 0  0  0  0  0  2  0  0  0  0  0  0  0  0  0  3  2  0  2
 0  0  0  1  0  1  0  0  0  2  2  0  0  4  0  0 10  1  0
 3  0  0  0  0  0  0  4  1  0  0  0  0  0  4  0  0  1  0
 2  0  2  0  0  0  0  1  0  0  4  1  0  3  0  0  0  3  3
 0  0  0  0  4  0  1  1  3  0  0  0  0  0  0  0  0  0  0
 0  0  0  4  0  0  4  2  4  0  0  0  0  0  0  4  0  0  0
 0  0  2  0  3 22  0  0  0  0  0  2  7  0  0  0  0  0  1
 0  9  0  0  6  0  0  0  0  0  0  0  0  0  5  1  4  0  8
```

```
Estações: 3, Total Cost: 3242.0, Average Travel Cost: 2.42, Stations: {(
9, 13), (9, 3), (3, 11)}, Time: 17.38s, Gerações: 50, Avaliações: 8034
 0  0  0  0  0  0  0  3  0  0  0  2  0  4  0  0  0  0  0
 0  0  0  0  0  0  0  0  0  0  0  0  0  0  2  0  0  0  0
 5  0  0  3  0  0  0  0  0  0  0  2  1  0  0  0  0  0  0
 0  0  4  0  0  0  0  0 14  0  0  0  0  2  0  7  0  0  0
 0  0  0  0  0  0  0  0  0  0  0  0  4  0  0  0  0  0  2
 0  0  3  3  0  0  0  0  0  3  0  0  0  0  0  0  2  0  0
 5  0  0  0  0  0  6  0  2  2  0  0  0  0  0  0  0  0  0
 0  0  2  0  0  0  0  0  4  0  0  5  0  0  0  0  0  4  1
 3  0  4  0  0  0  0  0  0  0  0  7  2  0  0  0  1  0  3
 0  0  1  0  0  4 11  0  3  0  0  0  0 11  3  0  0  0  0
 1  0  2  8  0  0  0  0  0  0  4  0  0  3  1  0  0  0  0
 3  0 11  0  0  0  0  0  0  0  0  0  0  3  0  7  0  0  0
 0  0  0  0  0  2  0  0  0  4  0  0  0  0  0  0  0  1  0
```

```
Estações: 4, Total Cost: 4206.578947368421, Average Travel Cost: 2.06578
94736842106, Stations: {(4, 4), (12, 15), (11, 3), (3, 15)}, Time: 53.05
s, Gerações: 61, Avaliações: 9681
 0  0  0  0  0  0  0  0 16  1  0  5  0  3  0  0  0  4  0
 0  2  3  0  0  5  0  0  0  0  0  0  0  6  0  0  0  1  0
 0  9  1  0  0  0  0  4  2  2  0  1  8  2  0  4 24 10 13
 0  0  3  0  0  0  0  2  0  0  4  0 11  0  0  0  2  1  1
 0  4  0  1  0  0  0  0  0  0  0  0  0  0  0  4  0  0  2
 0  3 12  0  4  0  0  0  0  0  0  0 10  0  0  0  0  0  0
 0  0  2  0  0  0  9  0  0  0  0  0  8  4  0  0  0  0  0
 3  0  0  0  0  2  0  0  6  0  3  0  6  0  0  0  0  0  0
 1  0  0  0  0  0  0  2  5  0  0 12  2  4  0  0  7  0  1
 6  4  4  0  0  8  0  3  2  0  0  0  9  0  0  0  0  0  0
 0  0  0  0  0  0  4  8  0  0  2  0  0  8  0  0  0  0  2
 0  4 18  0  0  0  0  0  0  0  4  1  2  0  0  0  0  8  3
 2  0  7  0  7  0  0  9  0  0  0  0  0  0  0  2  0  0  0
 0  0  0  0  7  2  0  0  1  0  0  0  0  0  0 11  0 30  0
 1  0  0  0  0  0  0  7  0  0  0  3  0  0  0  0  0  0  0
```

```
Estações: 4, Total Cost: 4233.802816901409, Average Travel Cost: 2.33802
81690140845, Stations: {(10, 10), (8, 1), (2, 5), (4, 14)}, Time: 17.83s
, Gerações: 39, Avaliações: 6976
 0  0  0  0 14  0  0  0  0  0  0  0  3  7  0  0  0  0  0
 0  2  5  7  2  0  0  0  6  0  0  0  1  0  0  3  0  0  1
 0  7  0  2  0  0  0  0  0  0  0 10  0  0  4  2  0  0  0
 0  0  0  4  0  0  0  5  0  0  0  0  0  0  0  0  0  2  0
 0  0  5  0  4  0  0  3  4  0  0  0  3  0  0  0  0  7  0
 0  0  0  0  0  0  3  0  6  0  0  5  0  4  0  0  0  0  0
 2  0  0  0  0  0  0  0  0  0  3  0  0  0  0  0  0  3  0
 0  0  7  0  4  0  0  0  0  0  1  0  0  0  8  0  0  0  0
 4  0  0  0  0  0  0  0  7  0  7  0  0  0  0  0  8  0  3
 8  0  0  0  0  0  2  6  2  0  0  0  0  0  3  0  0  0  0
 0  0  0  0  0  0  0 12  0  0  0  4  0  0  8  0  0  0  0
 0  0  4  0  0  0  0  0  0 13  0  2  0  0  0  0  0  1  0
 0  0  0  0  0  0  3  0  0  0  0  0  0  0  0  3  0  2  0
 0  0  0  0  0  0  0  0  5  0  0  0  0  0  0  0  0  7  0
 0  0  0  0  0  0  4  0  0  0  2  0  0  0  0  0  2  0  3
```

```
Estações: 4, Total Cost: 4272.850678733032, Average Travel Cost: 2.72850
6787330317, Stations: {(10, 9), (6, 1), (13, 15), (4, 14)}, Time: 12.60s
, Gerações: 22, Avaliações: 3899
 0  2  0  0  0  4  4  0  0  4  0  0  1  6  0  1  4  0  0
 1  0  0  2  0  0  0  0  0  0  0  0  9  3  0  0  0  0  0
 3  0  0  4  0  9  1  0  0  1  0  0  0  6  0  0  0  0  0
 0  4  0  0  4  4  0  0  0  0  0  0 12  0  0  0  0  1  0
 0  0  0  3  0  6  0  0  0  0  3  0  0 11 17  0  0  0  0
 6  0  1  0  0  6  0  0  1  0  0  0  0  0  0  0  0  0  0
 0  1  0  1  0  0  0  0  0  0  6  0  0  1  0  0  0  2  0
 1  0 10  0  0  2  2  0  3  4  8  0  0  9 11  1  0 16  0
 3  0  0  0  0  0  0  0  4  0  0  7  0  0  7  0  0  0  0
 0  6  0  1  0  0  0  0  3  5  0  0  2  4  0  0  0  0  0
 0  0  0  0  0  6  0  3  6  0 10  6  0  0  0  0  0  0  2
 3  0  0  4  4  0  2  0  0  0  1  0  0  1  2 16 11  0  0
 7  0  0  3  0  0  0  0  0 10 12  0  0  0  0  0  0  0  0
 0  2  0  0  0  0  2  2  0  0  0  0  0  0  0  4  1  0  1
 0  0  0  0  0  0  0  1  2  6  3  0  0  0  0  0  7  0  0
 0  0  1  0  4  8  0  0  0  0  0  6  0  0  0  6  0  0  0
```

```
Estações: 4, Total Cost: 4248.854961832061, Average Travel Cost: 2.48854
96183206106, Stations: {(2, 4), (4, 13), (13, 15), (9, 4)}, Time: 51.58s
, Gerações: 124, Avaliações: 16738
 3  4  0  0  3  0  0  0  0  6  0  4  4  0  0  0  4  0  0
 4  0  0  5  0  0  0  0  7  3  0  0  0  0  0  0  0  0  0
 0  0  0  0  0  0  0  4  0  0  0  0  0  0  0  0  0  1  0
 0  1  0  1  0  0  0  0  0  0  0  0  0  0  0  0  1  0  0
 0  1  4  0  0  0  0  0  0  0  0  2  0  0  0  0  9  0  0
 0  0  0  0  0  0  2  0  0  0  0  0  0  0  0  1  0  4  0
 4  0  0  5  0  0  0  0  0  0  0 11  0  0  0  0  0  3  0
 2  0  7  0  0 11  0  0  0  0  0  0  5  0  7  0  0  0  0
 9  0  0  0  1  0  1 15  0  0  0  0  1  0  0  0  1  4  3
 0  3  0  0  0  0  0  2  0  0  0  2  0  0  0  0  0  0  0
 0  0  2  4  0  0  0  0  0  0  0  0  4  0  1  0  0  0  0
 0  2  0  0  0  7  0  4  0  0  0  0  0  0  0  0  0  9  0
 0  0  6  0  0  0  2  0  1  0  0  0  0  0  0  0  1  0
 3  0  0  0  0  0  0  0  0  0  0  0  0  0  0  9  0  0  3
 0  0  0  0  0  1  0  0  0  0  0  0  9  0  0  0  7  0  0
 0  0  0  0  0  0  0  0  0  0  1  0  0  0  0  0  0  1  0
 0  0  0  0  0  0  0  0  6  3  0  0  0  0  0  0  1  0  0
```