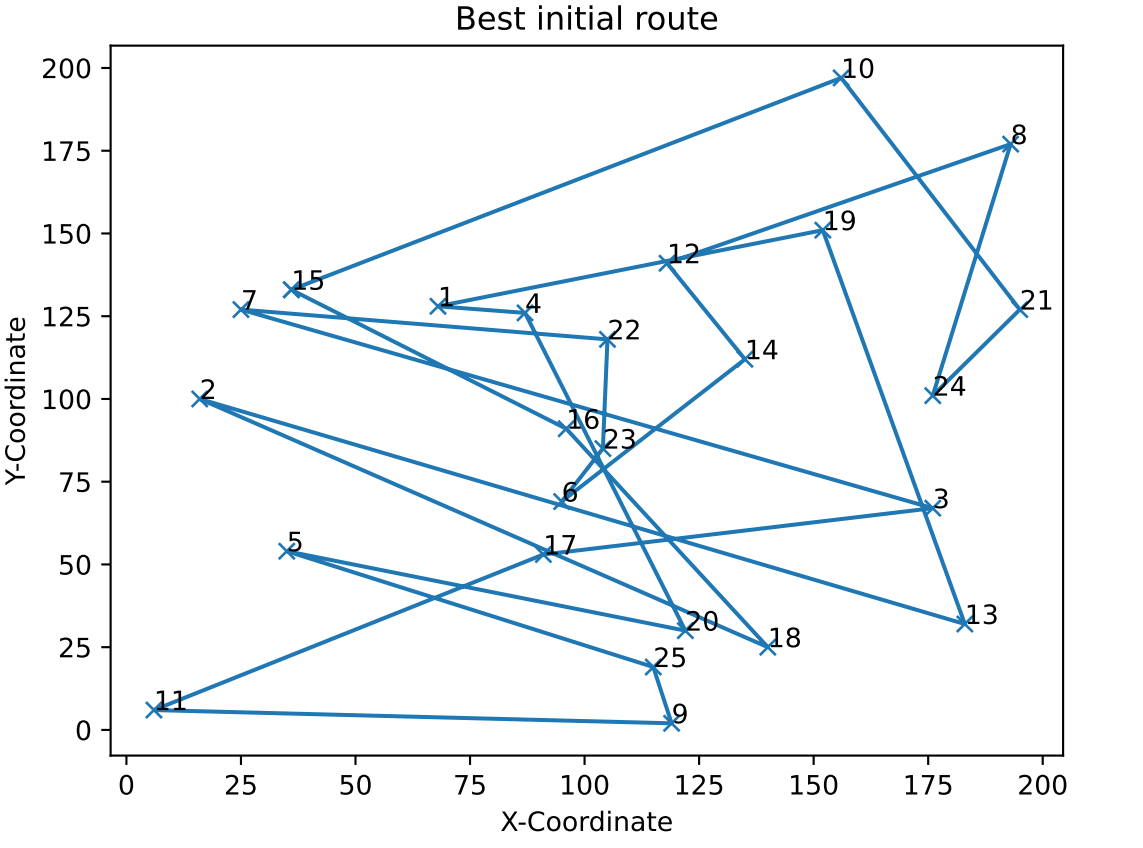
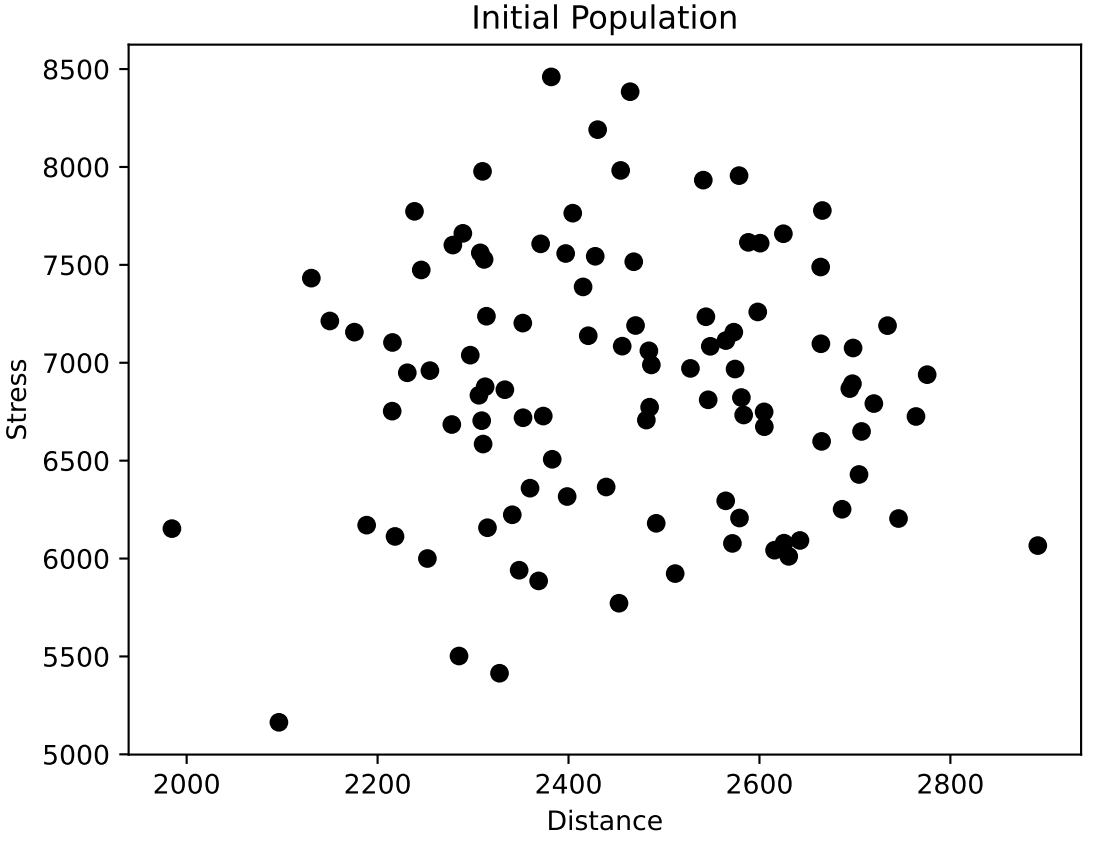
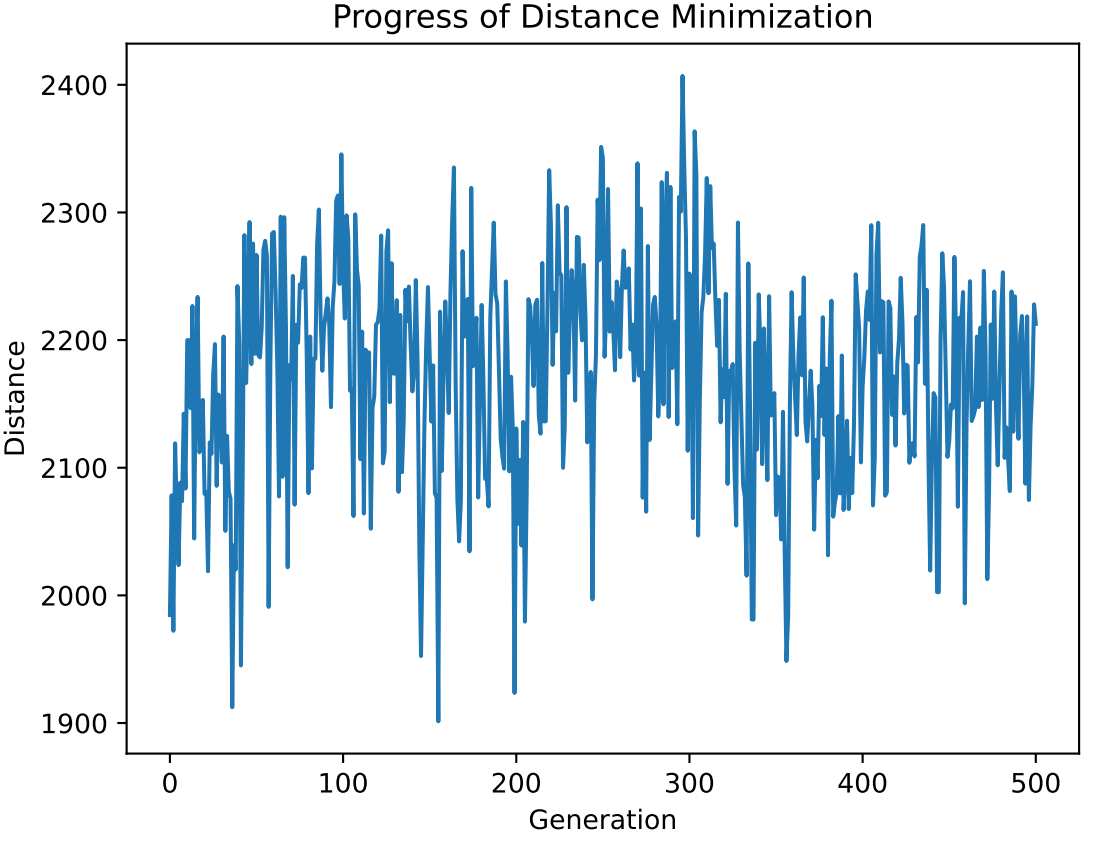
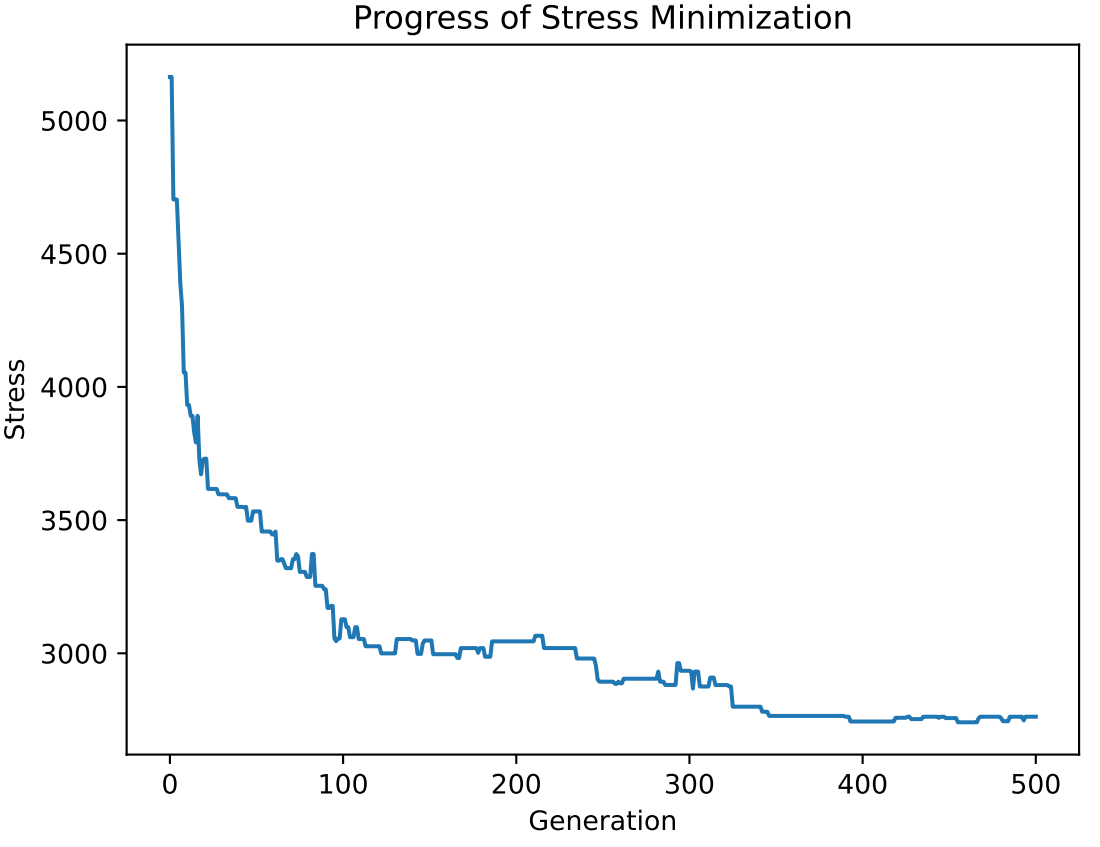
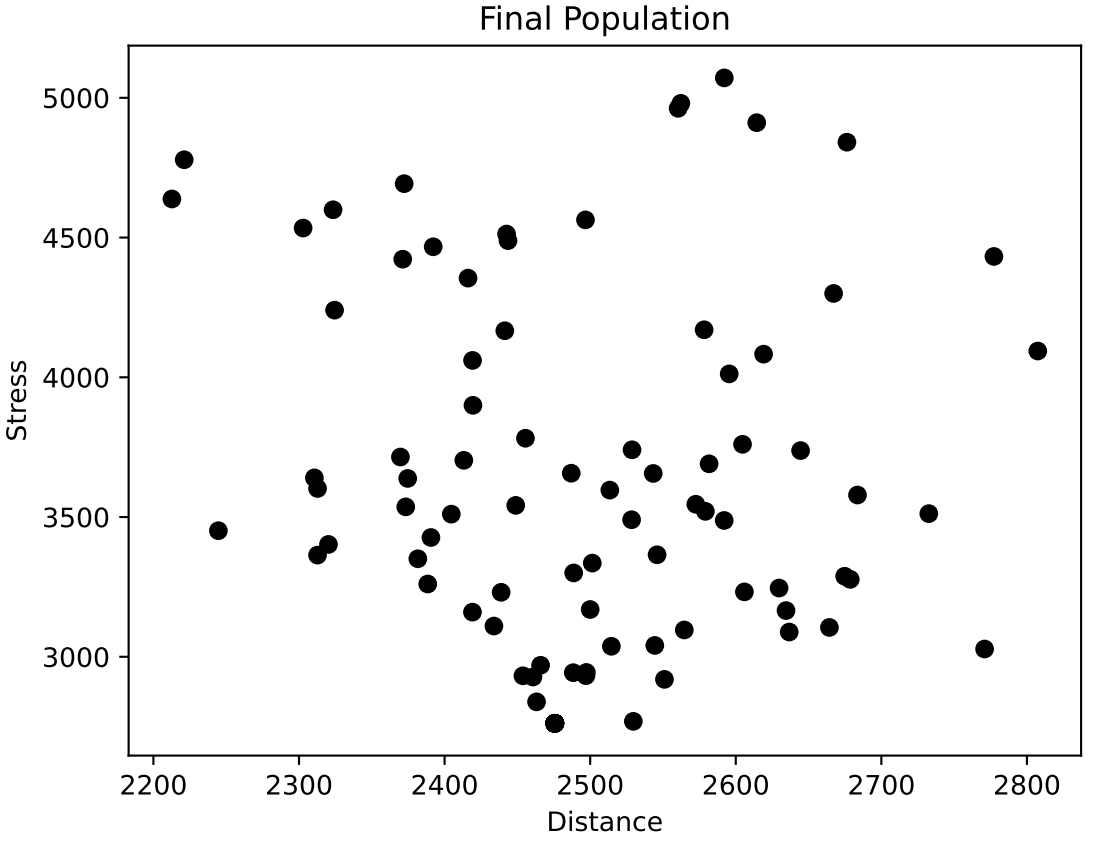

Best initial route
Y-Coordinate
X-Coordinate
0
25
50
75
100
125
150
175
200
10
8
19
12
15
1
4
21
7
22
14
24
2
16
23
6
3
5
17
13
20
18
25
11
9


Initial Population
Stress
Distance
8500
8000
7500
7000
6500
6000
5500
5000
2000
2200
2400
2600
2800

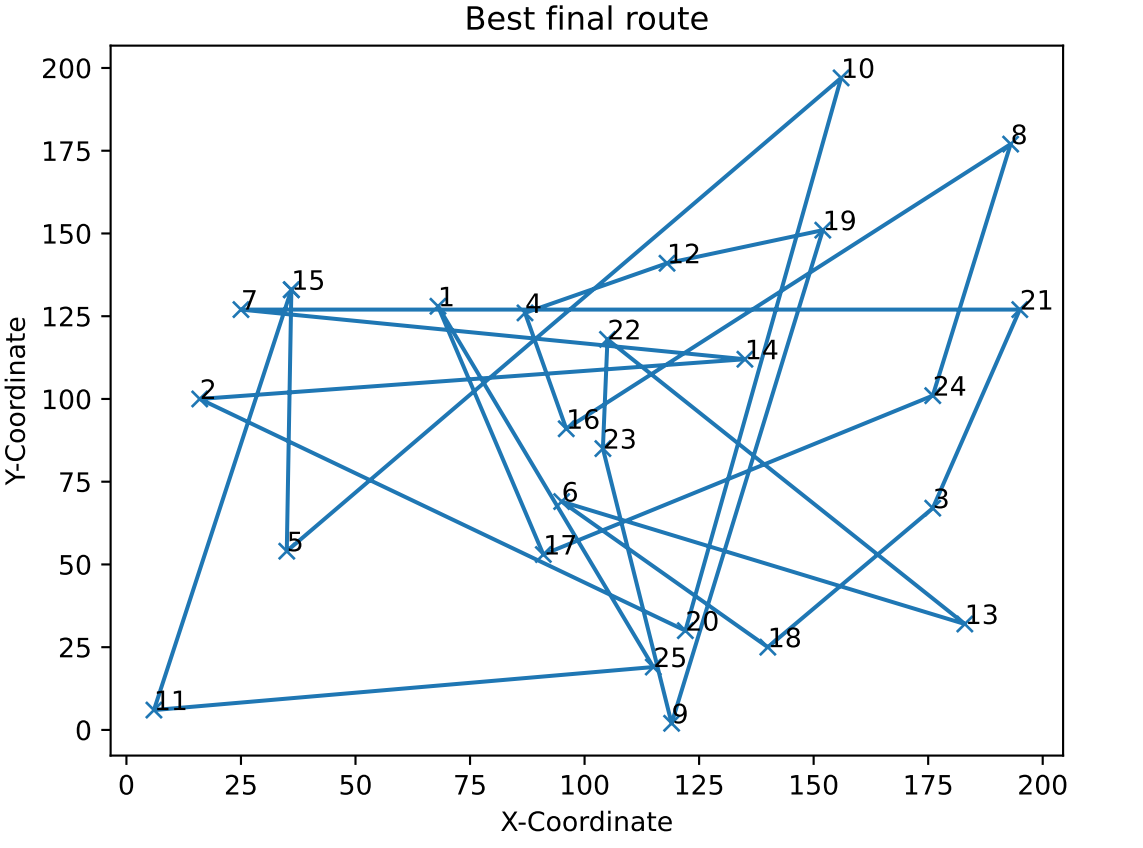

Progress of Distance Minimization
Distance
Generation
2400
2300
2200
2100
2000
1900
0
100
200
300
400
500


Progress of Stress Minimization
Stress
5000
4500
4000
3500
3000
0
100
200
300
400
500
Generation

Initial distance : 2096.631012743933
Initial stress: 5163.599999999999
Initial objective: 5163.599999999999
Final objective: 2761.9999999999995
Final distance : 2475.6928638164486
Final stress: 2761.9999999999995


Final Population
Stress
Distance
5000
4500
4000
3500
3000
2200
2300
2400
2500
2600
2700
2800

[15, 11, 25, 1, 17,
24, 8, 16, 4, 12,
19, 9, 23, 22, 13,
6, 18, 3, 21, 7,
14, 2, 20, 10, 5]


Best final route
Y-Coordinate
X-Coordinate
0
25
50
75
100
125
150
175
200
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25