

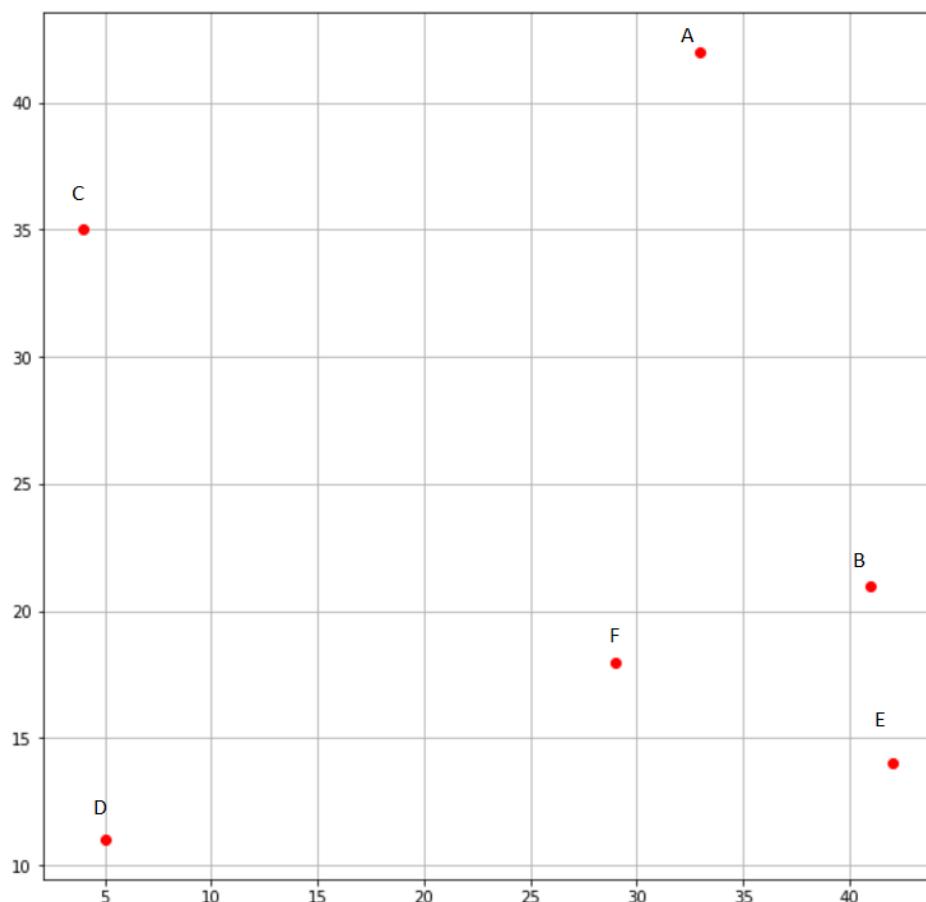
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Task 1:

Cities coordinates:

```
[33, 42],  
[41, 21],  
[ 4, 35],  
[ 5, 11],  
[42, 14],  
[29, 18]]
```



Distances matrix:

	0	1	2	3	4	5
0	0.000000	22.472205	29.832868	41.773197	29.410882	24.331050
1	22.472205	0.000000	39.560081	37.363083	7.071068	12.369317
2	29.832868	39.560081	0.000000	24.020824	43.416587	30.232433
3	41.773197	37.363083	24.020824	0.000000	37.121422	25.000000
4	29.410882	7.071068	43.416587	37.121422	0.000000	13.601471
5	24.331050	12.369317	30.232433	25.000000	13.601471	0.000000

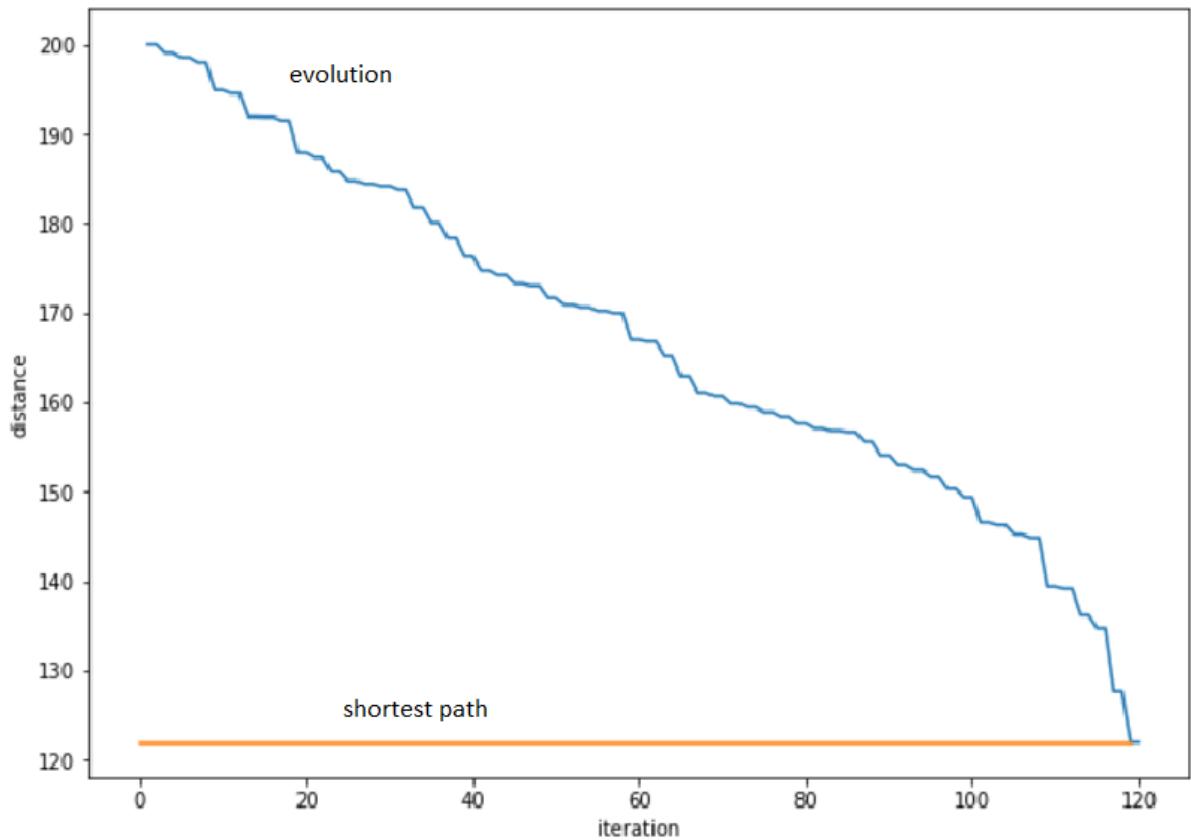
Cities and their pathes:

```
([0, 1, 2, 3, 4, 5, 0], 161.10705325934731)
([0, 1, 2, 3, 5, 4, 0], 154.06546309131875)
([0, 1, 2, 4, 3, 5, 0], 191.90134514386804)
([0, 1, 2, 4, 5, 3, 0], 185.8235402932803)
([0, 1, 2, 5, 3, 4, 0], 183.7970235858578)
([0, 1, 2, 5, 4, 3, 0], 184.7608089032986)
([0, 1, 3, 2, 4, 5, 0], 165.2052200598248)
([0, 1, 3, 2, 5, 4, 0], 157.10089850181456)
([0, 1, 3, 4, 2, 5, 0], 194.93678055436385)
```

Shortest path:

```
([0, 1, 4, 5, 3, 2, 0], 121.99843545412638)
```

Task 2:



Shortest path:

```
([0, 1, 4, 5, 3, 2, 0], 121.99843545412638)
```