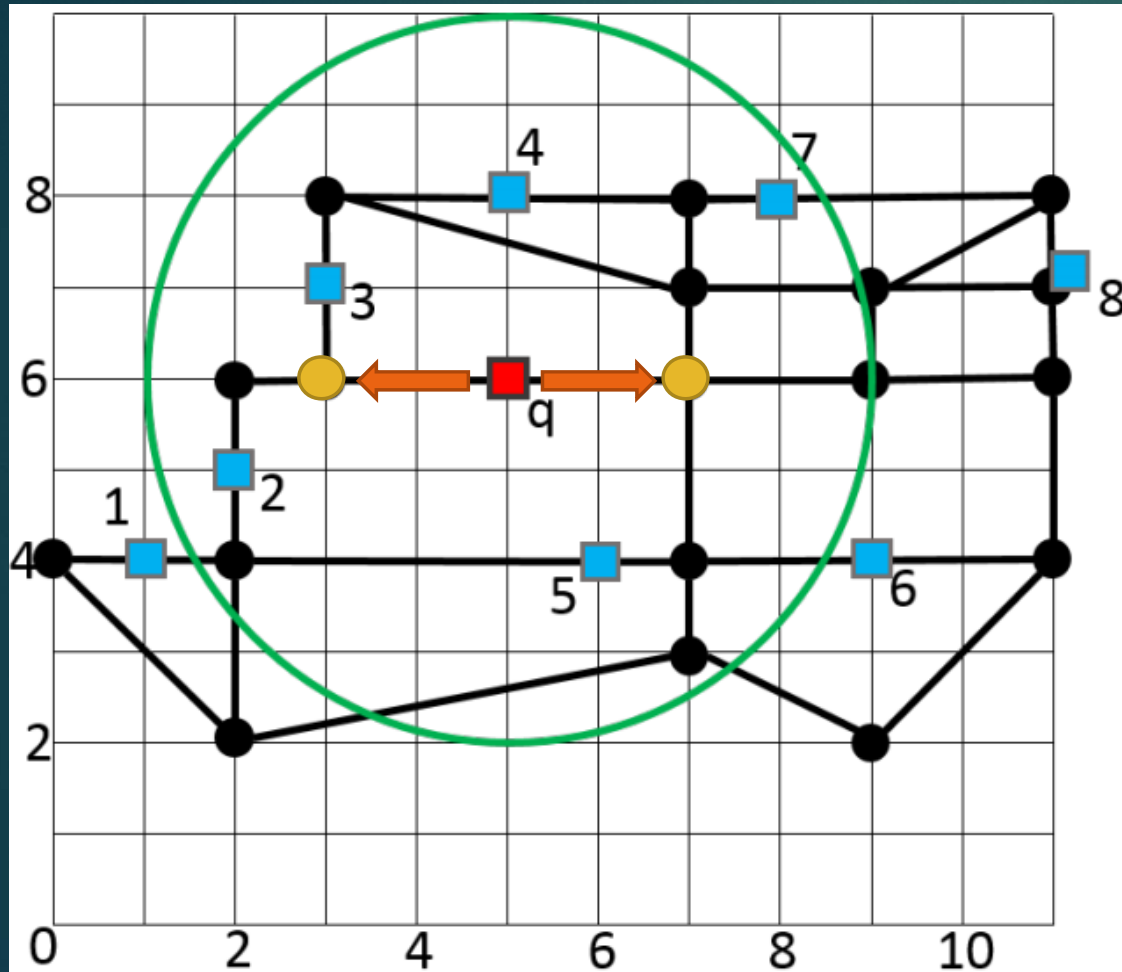


Range Euclidean Restriction (RER)



Kandidatenmenge $S = 2,3,4,5,7$

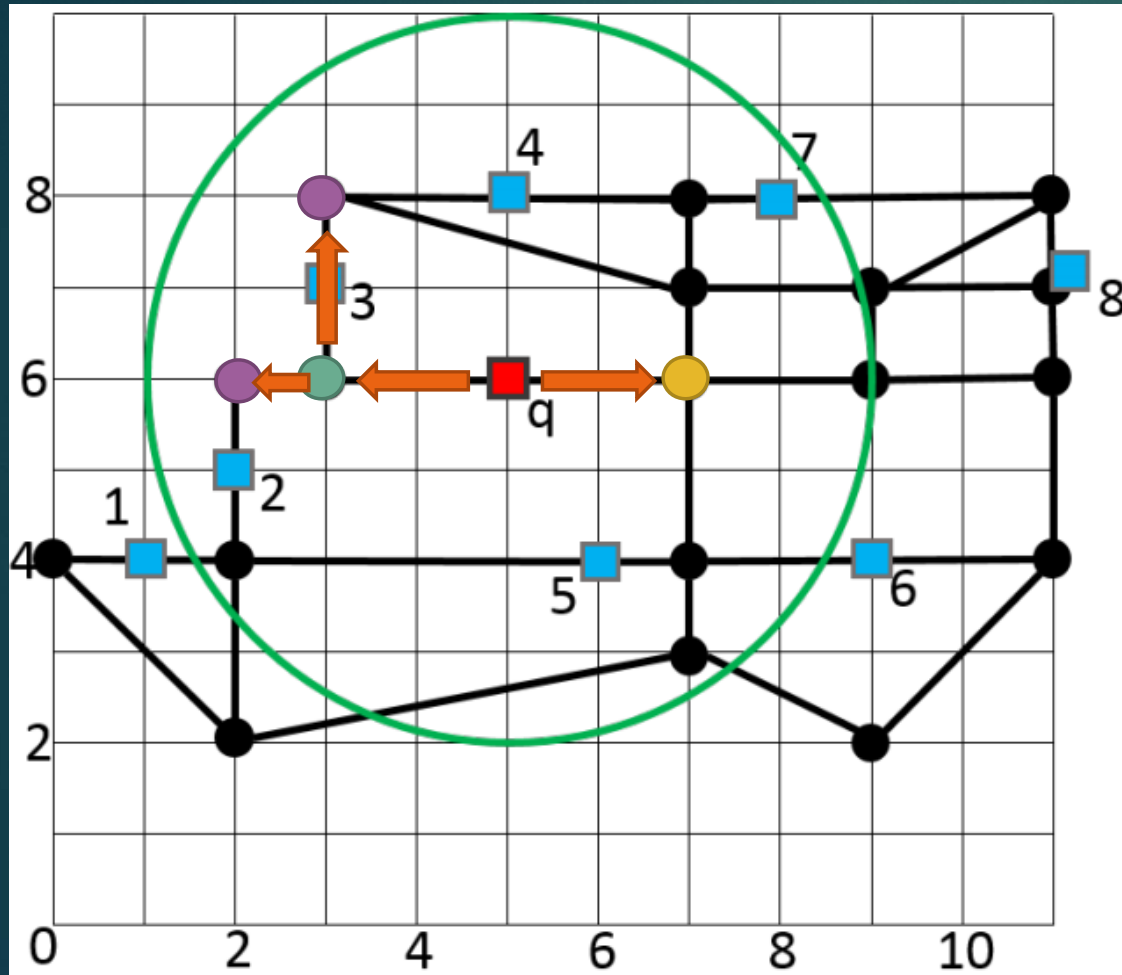


$Q = ([\text{dist}](x,y), \dots)$

1. [2](3,6), [2](7,6): POI-3

Gehen Sie davon aus, dass stets zuerst der R-Baum-Knoten besucht wird, dessen linke untere Ecke die kleinste Koordinatensumme (oder bei Gleichheit x-Koordinate) hat.

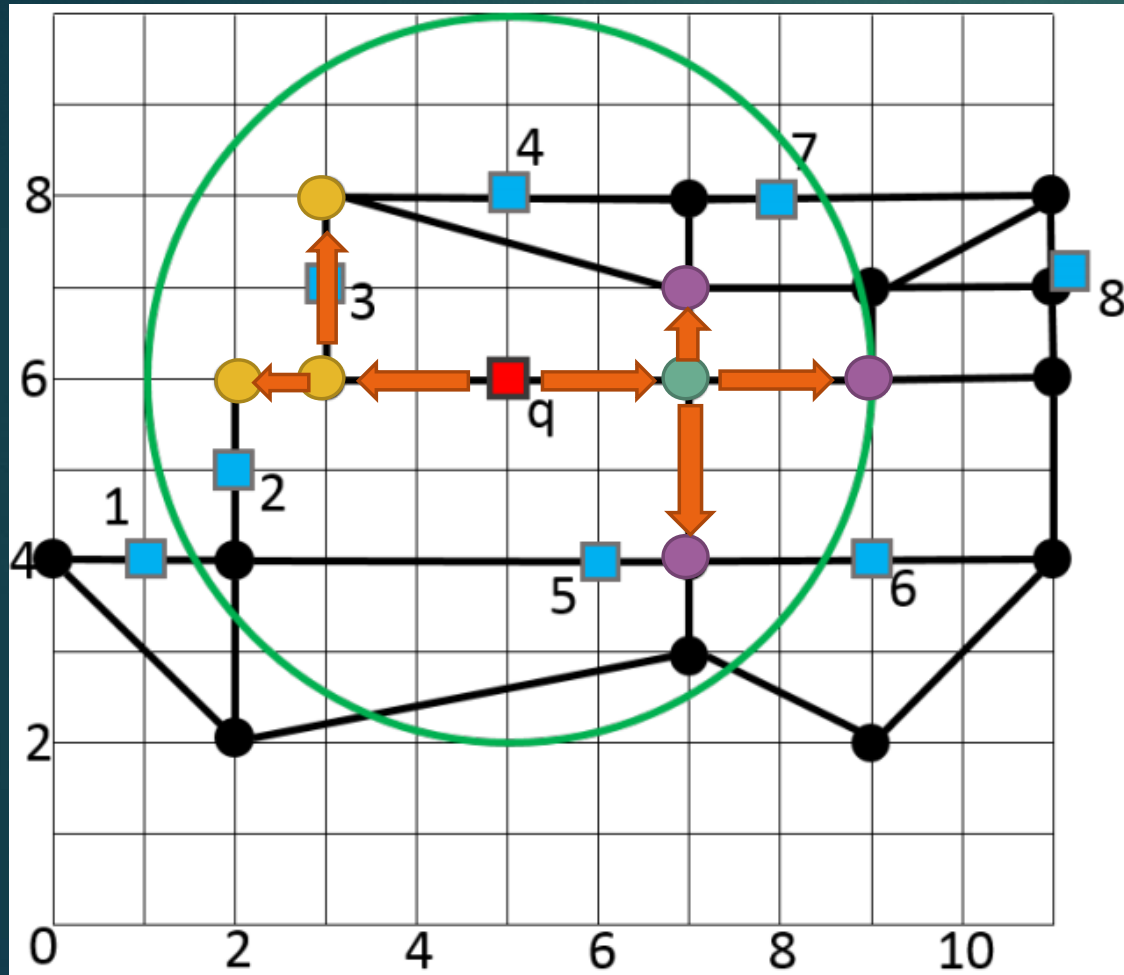
Kandidatenmenge $S = 2,3,4,5,7$



$Q = ([\text{dist}](x,y), \dots)$

1. $[2](3,6), [2](7,6)$: POI-3
2. $[2](7,6), [3](2,6), [4](3,8)$

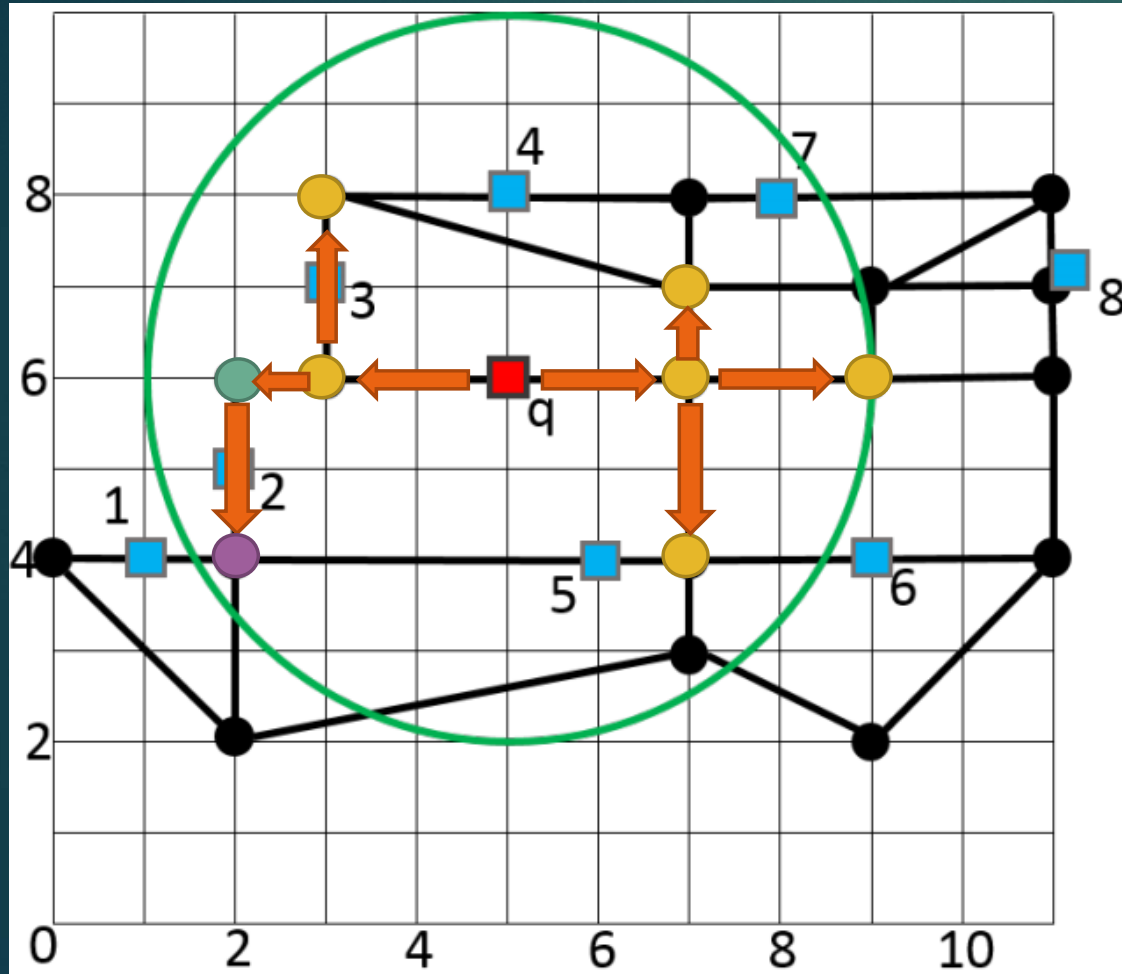
Kandidatenmenge $S = 2,3,4,5,7$



$Q = ([\text{dist}](x,y), \dots)$

1. $[2](3,6), [2](7,6)$: POI-3
2. $[2](7,6), [3](2,6), [4](3,8)$
3. $[3](2,6), [3](7,7), [4](3,8), [4](7,4), [4](9,6)$: POI-2

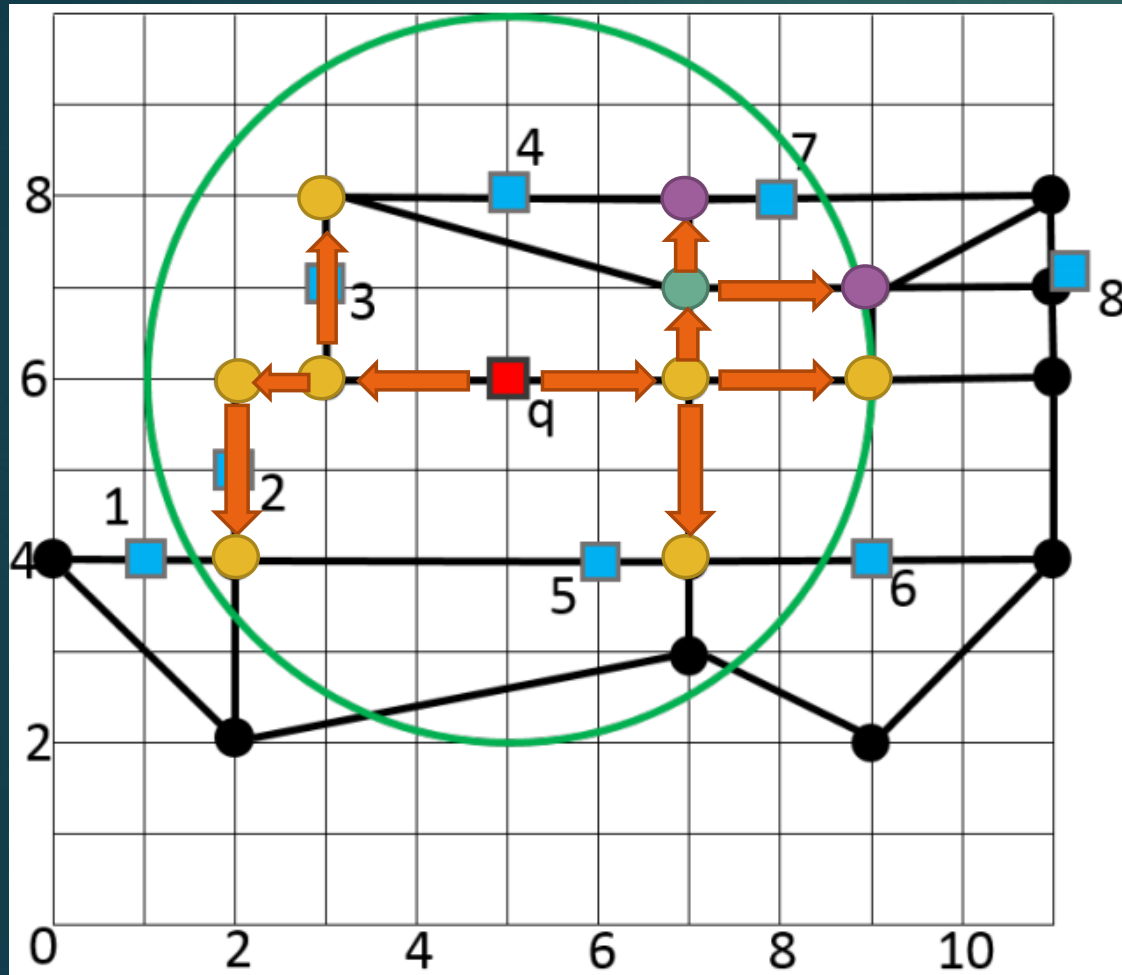
Kandidatenmenge $S = 2,3,4,5,7$



$Q = ([\text{dist}](x,y), \dots)$

1. ~~[2](3,6)~~, [2](7,6): POI-3
2. ~~[2](7,6)~~, [3](2,6), [4](3,8)
3. ~~[3](2,6)~~, [3](7,7), [4](3,8), [4](7,4), [4](9,6): POI-2
4. [3](7,7), [4](3,8), [4](7,4), [4](9,6), **[5](2,4)**

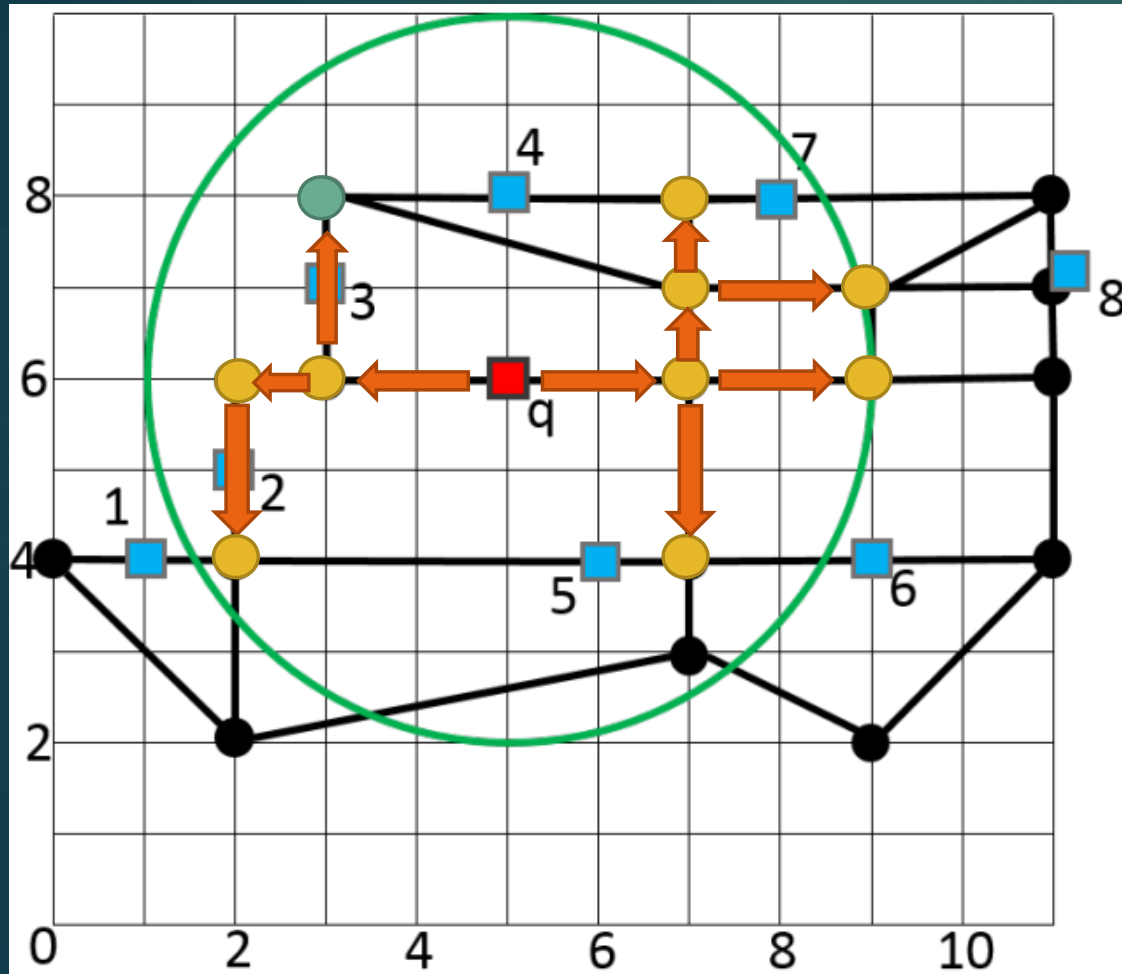
Kandidatenmenge $S = 2,3,4,5,7$



$Q = ([dist](x,y), \dots)$

1. ~~[2](3,6), [2](7,6)~~: POI-3
2. ~~[2](7,6), [3](2,6), [4](3,8)~~
3. ~~[3](2,6), [3](7,7), [4](3,8), [4](7,4), [4](9,6)~~: POI-2
4. ~~[3](7,7), [4](3,8), [4](7,4), [4](9,6), [5](2,4)~~
5. ~~[4](3,8), [4](7,4), [4](7,8), [4](9,6), [4](9,7), [5](2,4)~~: POI-4

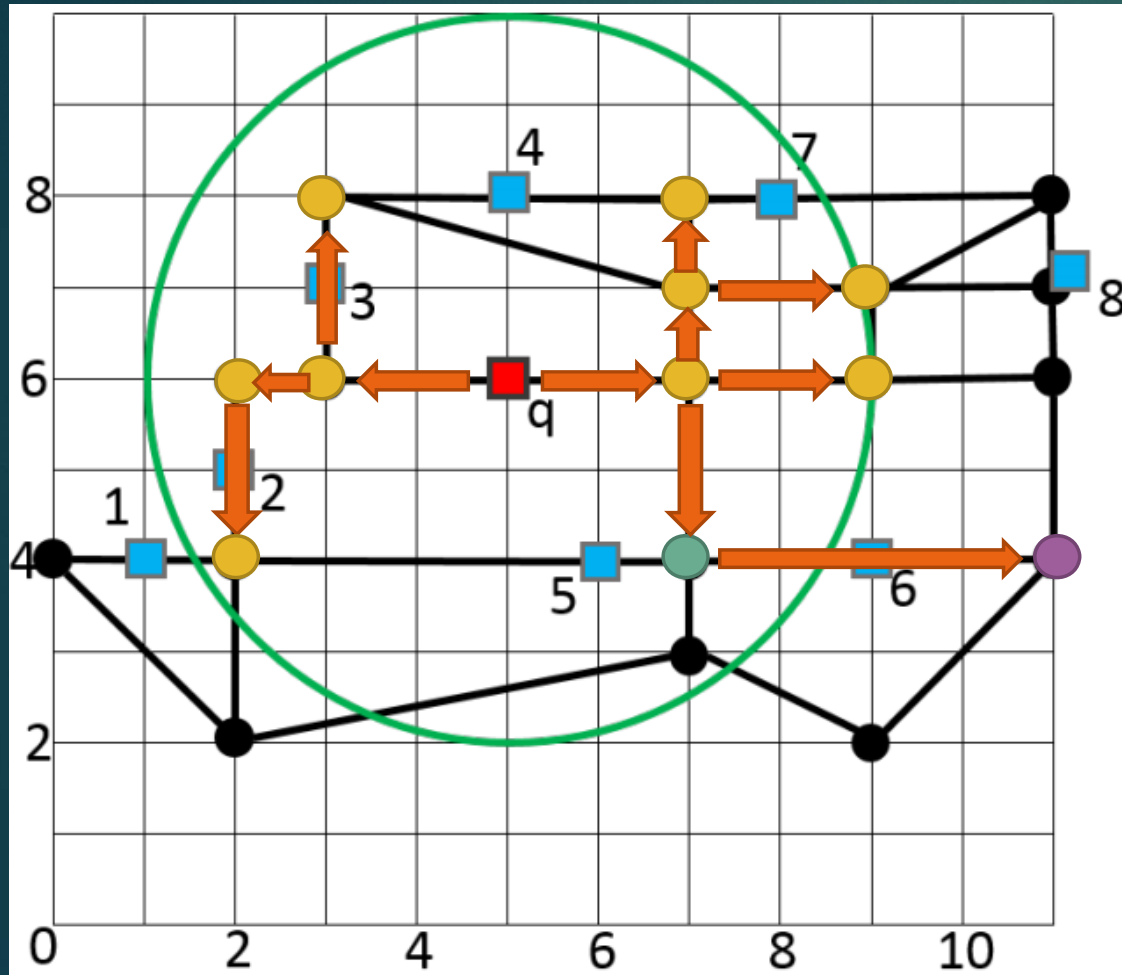
Kandidatenmenge $S = 2,3,4,5,7$



$Q = ([\text{dist}](x,y), \dots)$

1. ~~[2](3,6), [2](7,6)~~: POI-3
2. ~~[2](7,6), [3](2,6), [4](3,8)~~
3. ~~[3](2,6), [3](7,7), [4](3,8), [4](7,4), [4](9,6)~~: POI-2
4. ~~[3](7,7), [4](3,8), [4](7,4), [4](9,6), [5](2,4)~~
5. ~~[4](3,8), [4](7,4), [4](7,8), [4](9,6), [4](9,7), [5](2,4)~~: POI-4
6. ~~[4](7,4), [4](7,8), [4](9,6), [4](9,7), [5](2,4)~~: POI-5

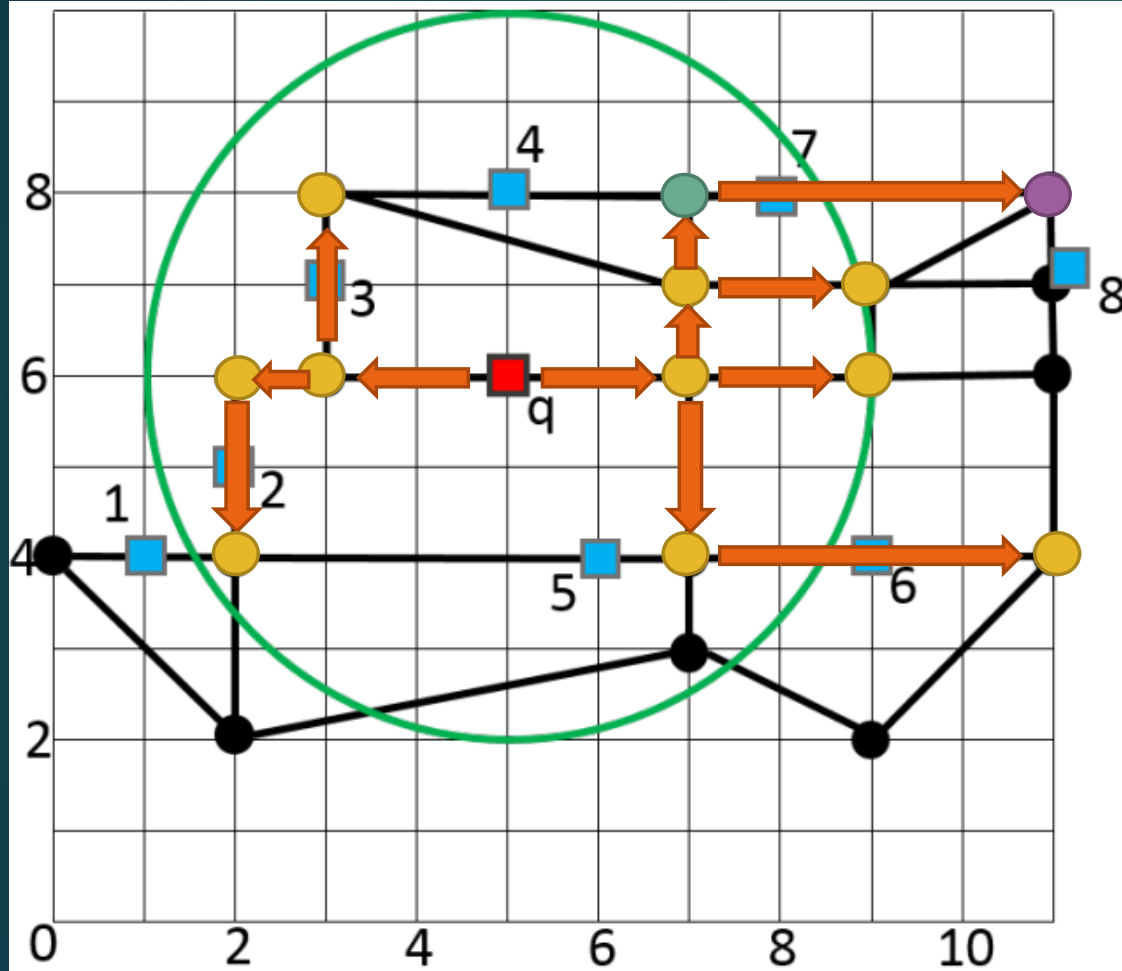
Kandidatenmenge $S = 2,3,4,5,7$



$Q = ([dist](x,y), \dots)$

1. ~~[2](3,6), [2](7,6)~~: POI-3
2. ~~[2](7,6), [3](2,6), [4](3,8)~~
3. ~~[3](2,6), [3](7,7), [4](3,8), [4](7,4), [4](9,6)~~: POI-2
4. ~~[3](7,7), [4](3,8), [4](7,4), [4](9,6), [5](2,4)~~
5. ~~[4](3,8), [4](7,4), [4](7,8), [4](9,6), [4](9,7), [5](2,4)~~: POI-4
6. ~~[4](7,4), [4](7,8), [4](9,6), [4](9,7), [5](2,4)~~: POI-5
7. ~~[4](7,8), [4](9,6), [4](9,7), [5](2,4), [8](11,4)~~: POI-7

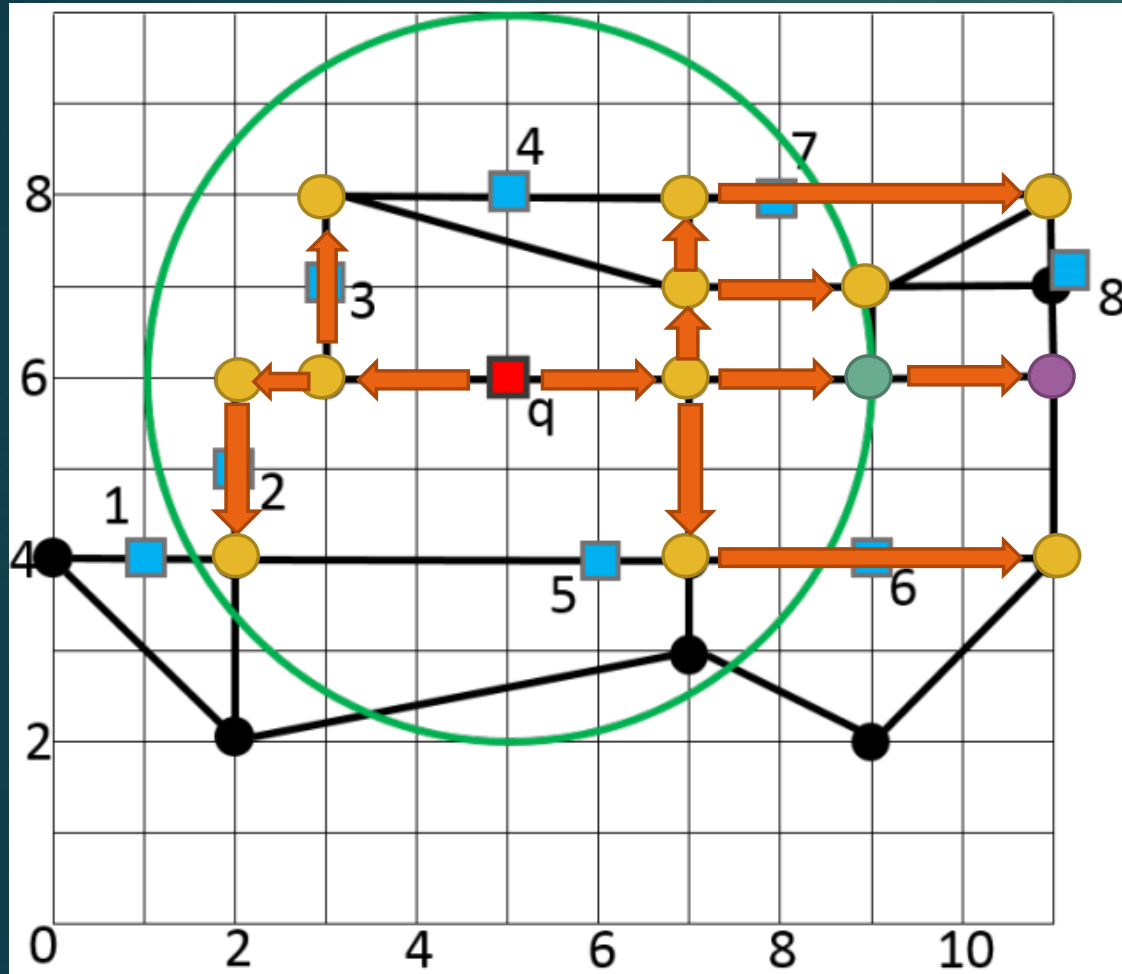
Kandidatenmenge $S = 2,3,4,5,7$



$Q = ([dist](x,y), \dots)$

1. ~~[2](3,6), [2](7,6)~~: POI-3
2. ~~[2](7,6), [3](2,6), [4](3,8)~~
3. ~~[3](2,6), [3](7,7), [4](3,8), [4](7,4), [4](9,6)~~: POI-2
4. ~~[3](7,7), [4](3,8), [4](7,4), [4](9,6), [5](2,4)~~
5. ~~[4](3,8), [4](7,4), [4](7,8), [4](9,6), [4](9,7), [5](2,4)~~: POI-4
6. ~~[4](7,4), [4](7,8), [4](9,6), [4](9,7), [5](2,4)~~: POI-5
7. ~~[4](7,8), [4](9,6), [4](9,7), [5](2,4), [8](11,4)~~: POI-7
8. ~~[4](9,6), [4](9,7), [5](2,4), [8](11,4), [8](11,8)~~

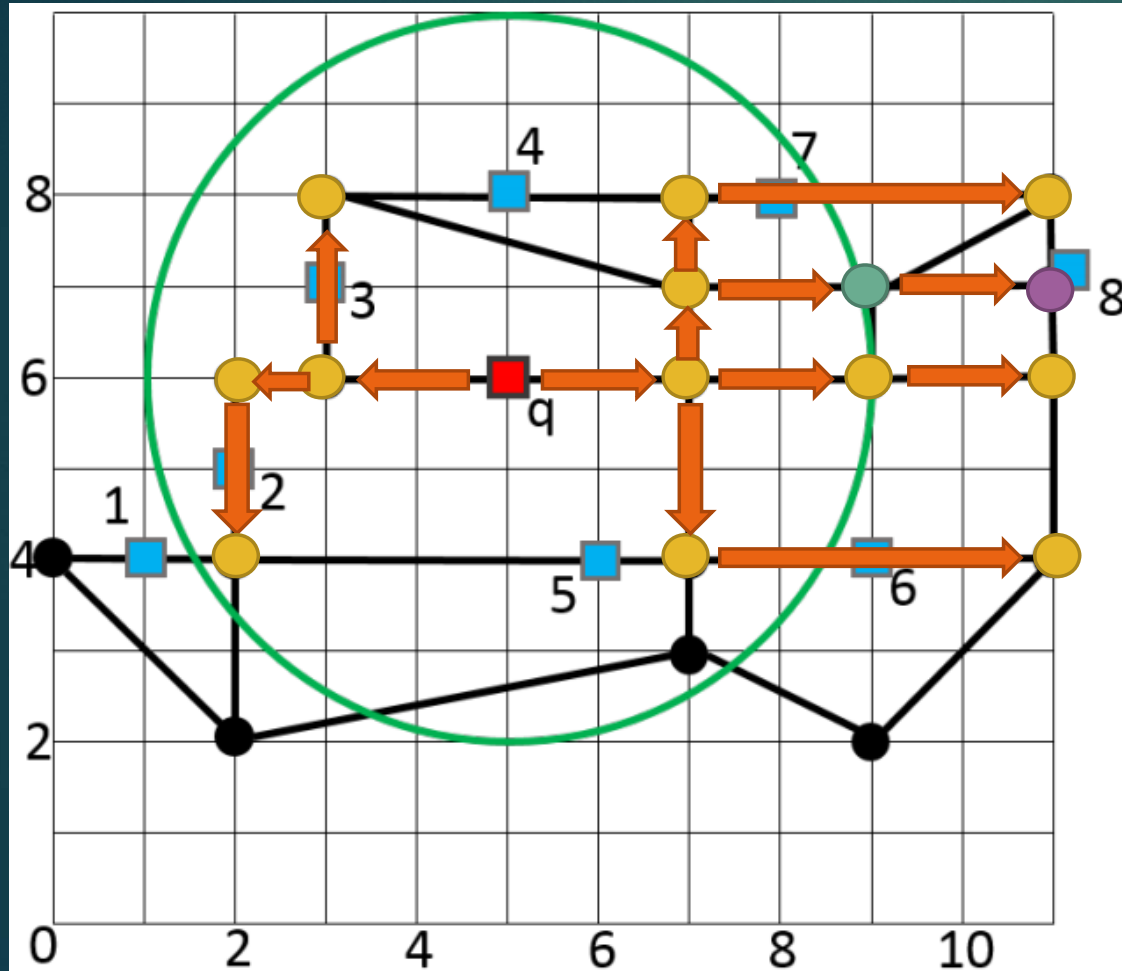
Kandidatenmenge $S = 2,3,4,5,7$



$Q = ([\text{dist}](x,y), \dots)$

1. ~~[2](3,6), [2](7,6)~~: POI-3
2. ~~[2](7,6), [3](2,6), [4](3,8)~~
3. ~~[3](2,6), [3](7,7), [4](3,8), [4](7,4), [4](9,6)~~: POI-2
4. ~~[3](7,7), [4](3,8), [4](7,4), [4](9,6), [5](2,4)~~
5. ~~[4](3,8), [4](7,4), [4](7,8), [4](9,6), [4](9,7), [5](2,4)~~: POI-4
6. ~~[4](7,4), [4](7,8), [4](9,6), [4](9,7), [5](2,4)~~: POI-5
7. ~~[4](7,8), [4](9,6), [4](9,7), [5](2,4), [8](11,4)~~: POI-7
8. ~~[4](9,6), [4](9,7), [5](2,4), [8](11,4), [8](11,8)~~
9. ~~[4](9,7), [5](2,4), [6](11,6), [8](11,4), [8](11,8)~~

Kandidatenmenge $S = 2,3,4,5,7$



$Q = ([\text{dist}](x,y), \dots)$

1. ~~[2](3,6), [2](7,6)~~: POI-3
2. ~~[2](7,6), [3](2,6), [4](3,8)~~
3. ~~[3](2,6), [3](7,7), [4](3,8), [4](7,4), [4](9,6)~~: POI-2
4. ~~[3](7,7), [4](3,8), [4](7,4), [4](9,6), [5](2,4)~~
5. ~~[4](3,8), [4](7,4), [4](7,8), [4](9,6), [4](9,7), [5](2,4)~~: POI-4
6. ~~[4](7,4), [4](7,8), [4](9,6), [4](9,7), [5](2,4)~~: POI-5
7. ~~[4](7,8), [4](9,6), [4](9,7), [5](2,4), [8](11,4)~~: POI-7
8. ~~[4](9,6), [4](9,7), [5](2,4), [8](11,4), [8](11,8)~~
9. ~~[4](9,7), [5](2,4), [6](11,6), [8](11,4), [8](11,8)~~
10. ~~[5](2,4), [6](11,6), [7](11,7), [8](11,4), [8](11,8)~~
Dist=5 ... größer als epsilon-Range! STOP!

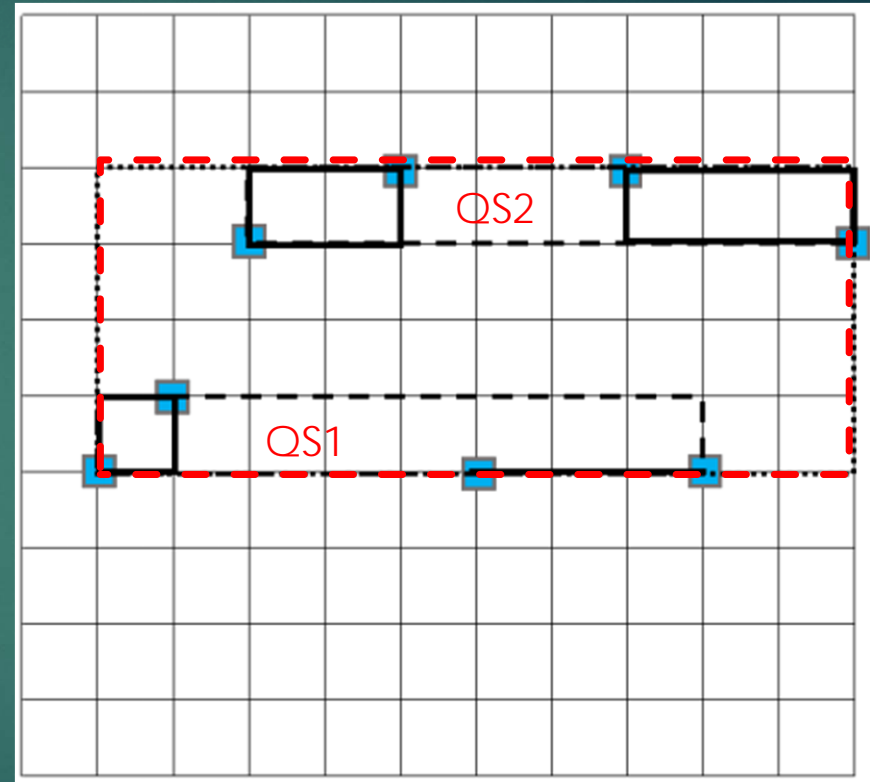
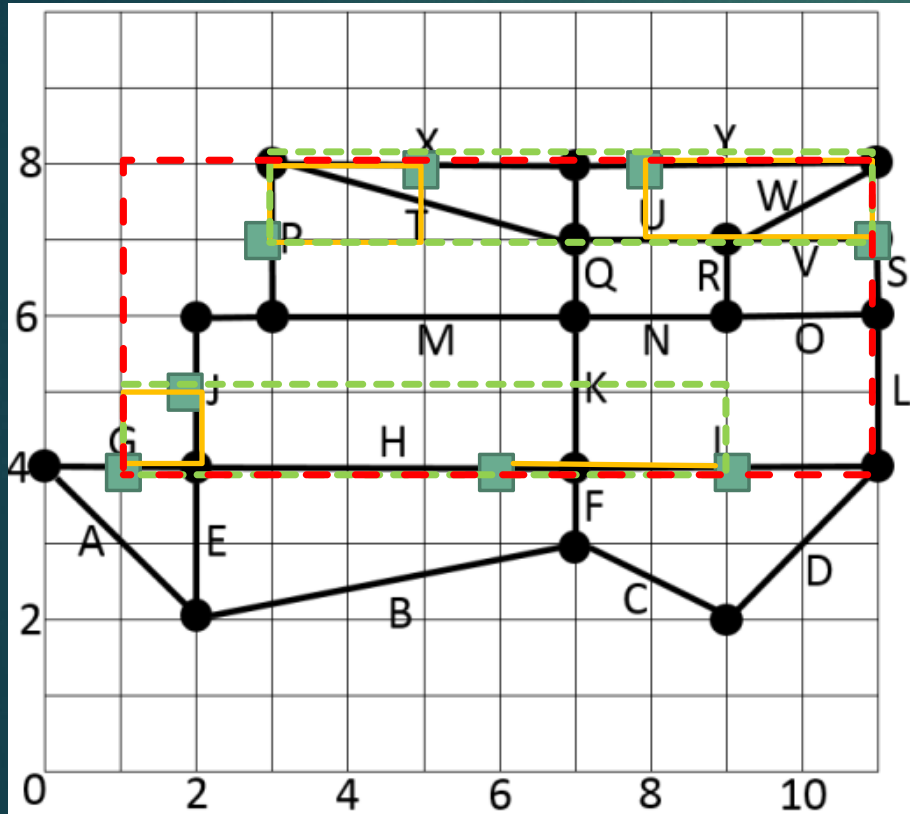
Ergebnismenge $R = 2,3$

Range Network Expansion (RNE)

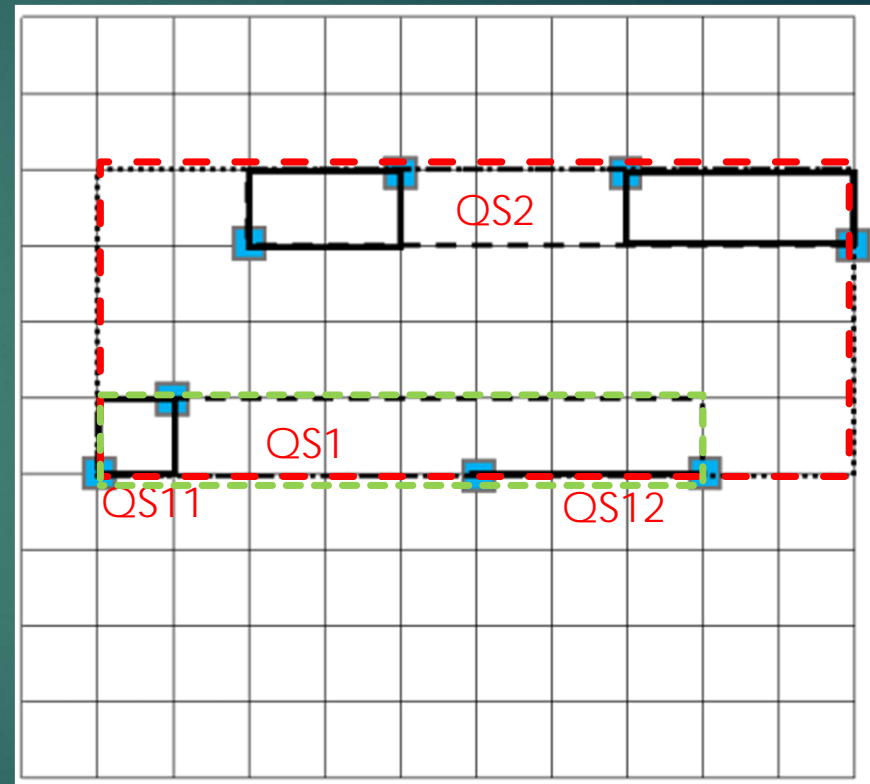
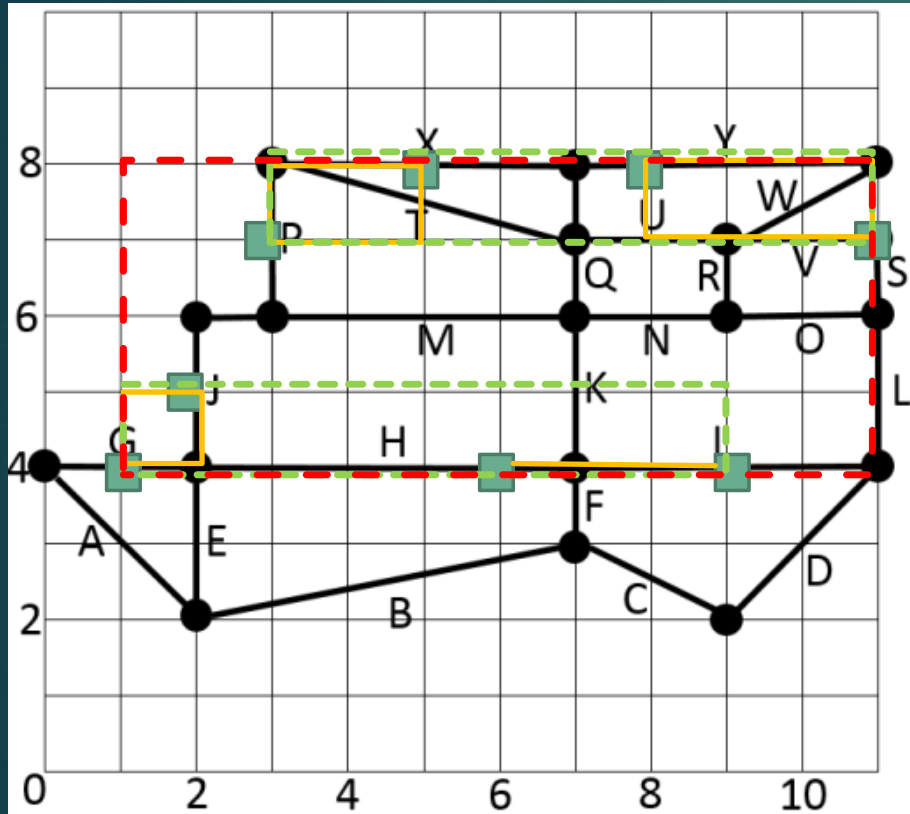


Aufruf root: QS1 = E,F,G,H,I,J,K

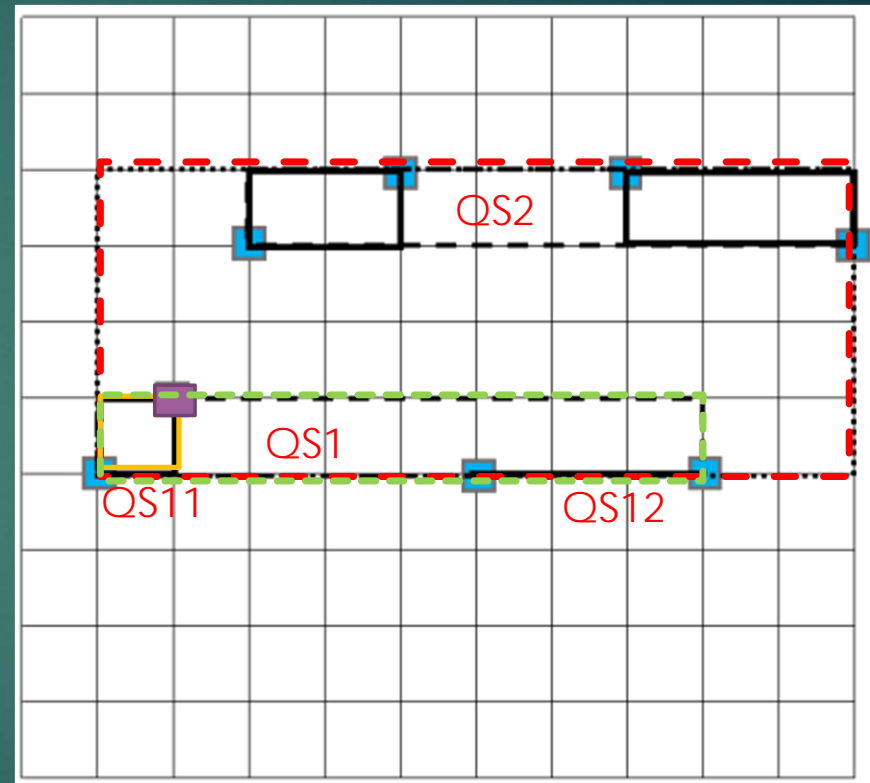
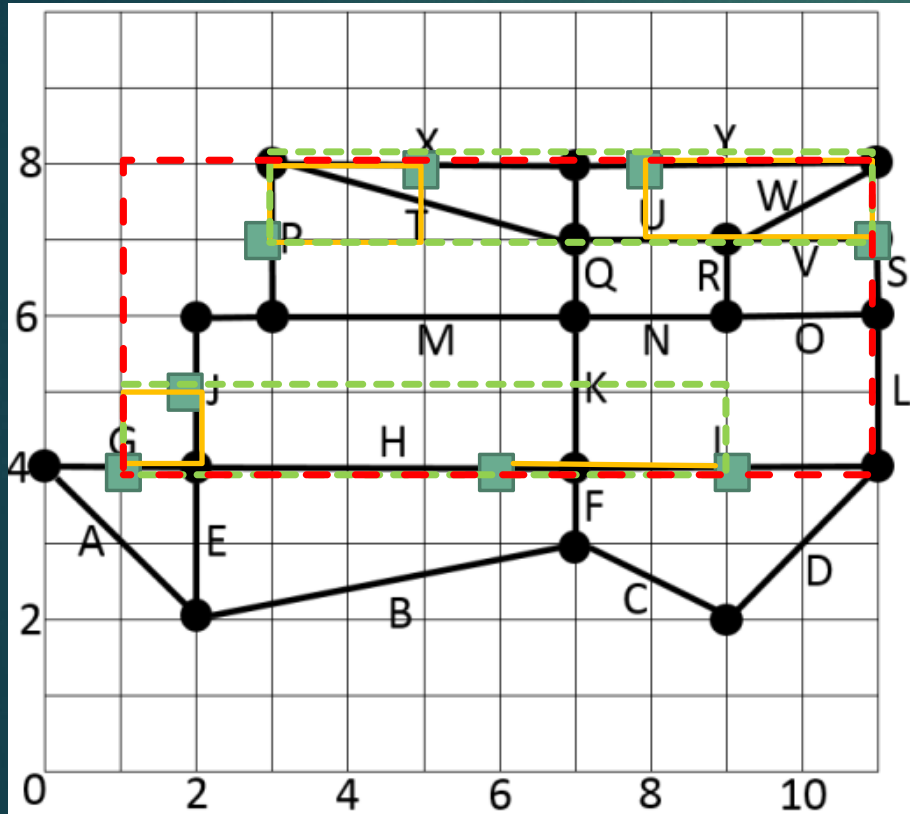
QS2 = P,Q,R,S,T,U,V,W,X,Y



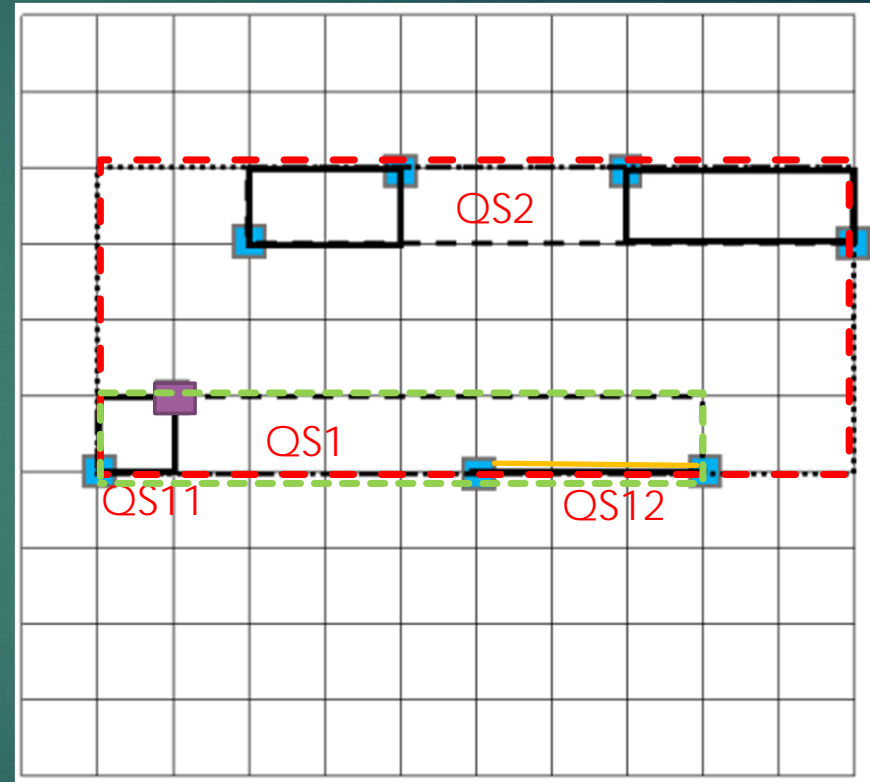
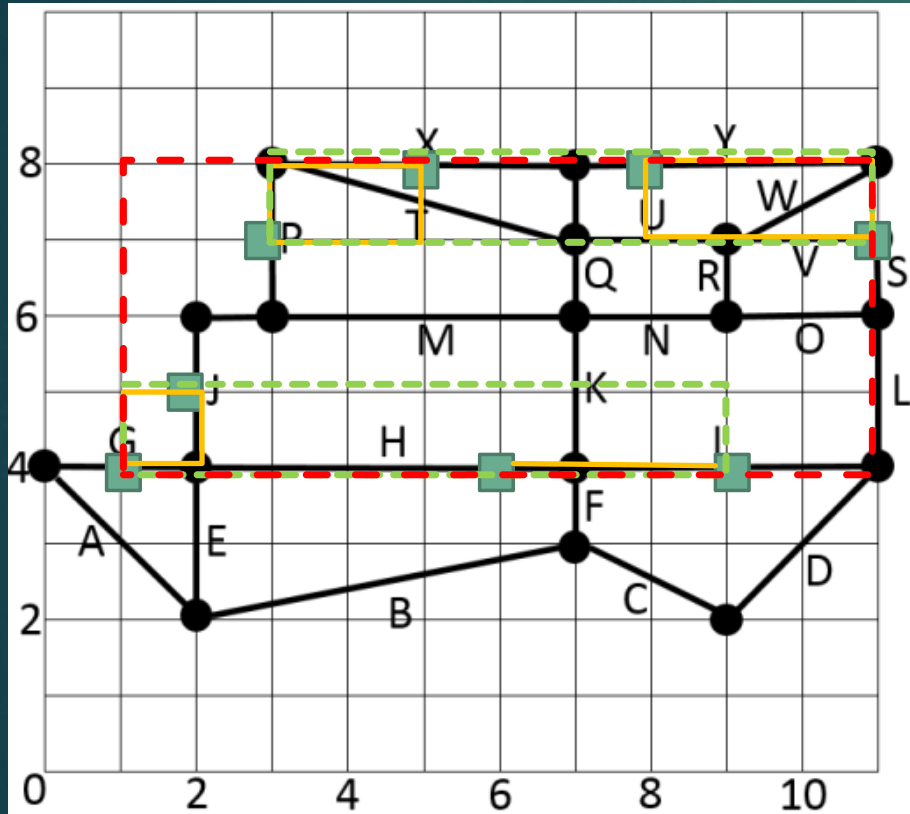
Aufruf QS1: QS11 = E,G,J,H QS12 = F,H,I,K



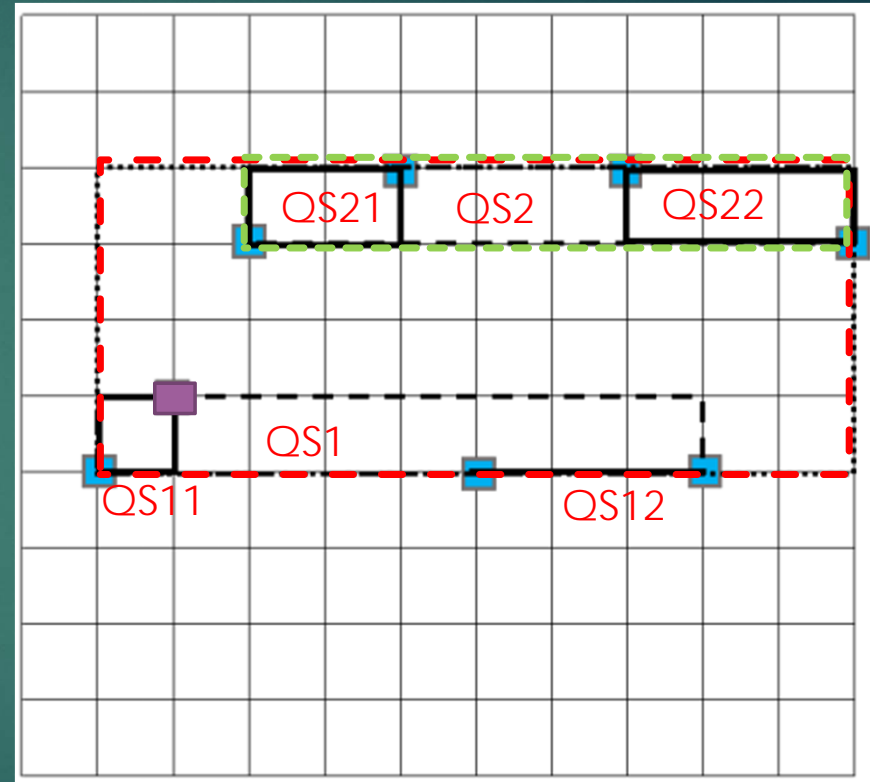
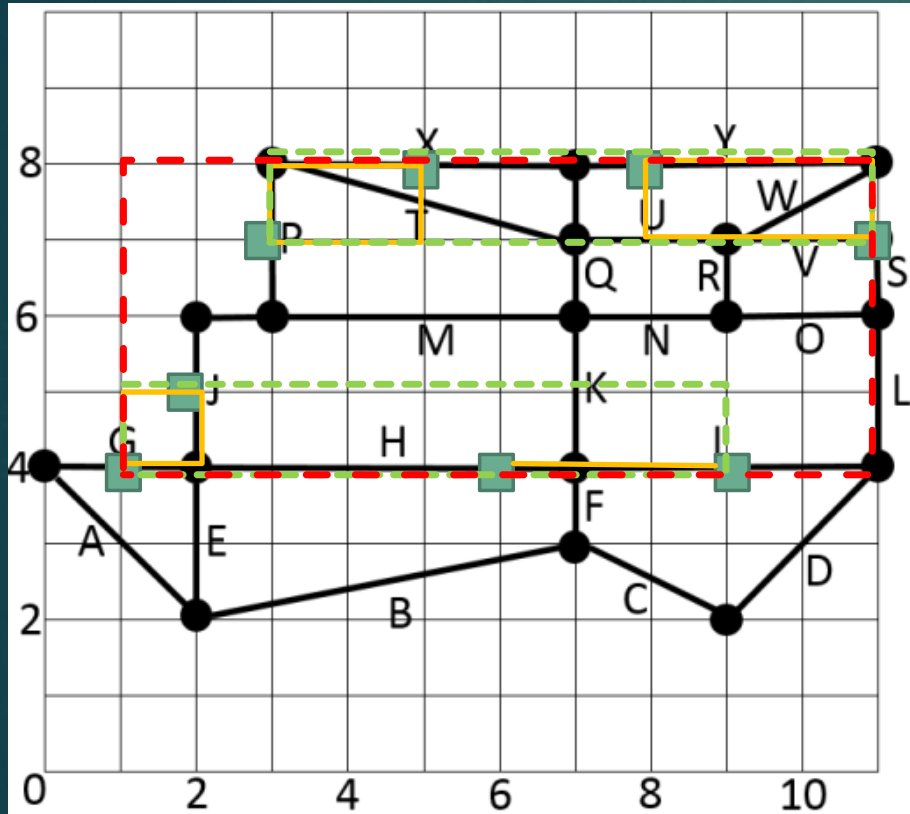
Aufruf QS11: result = {2}



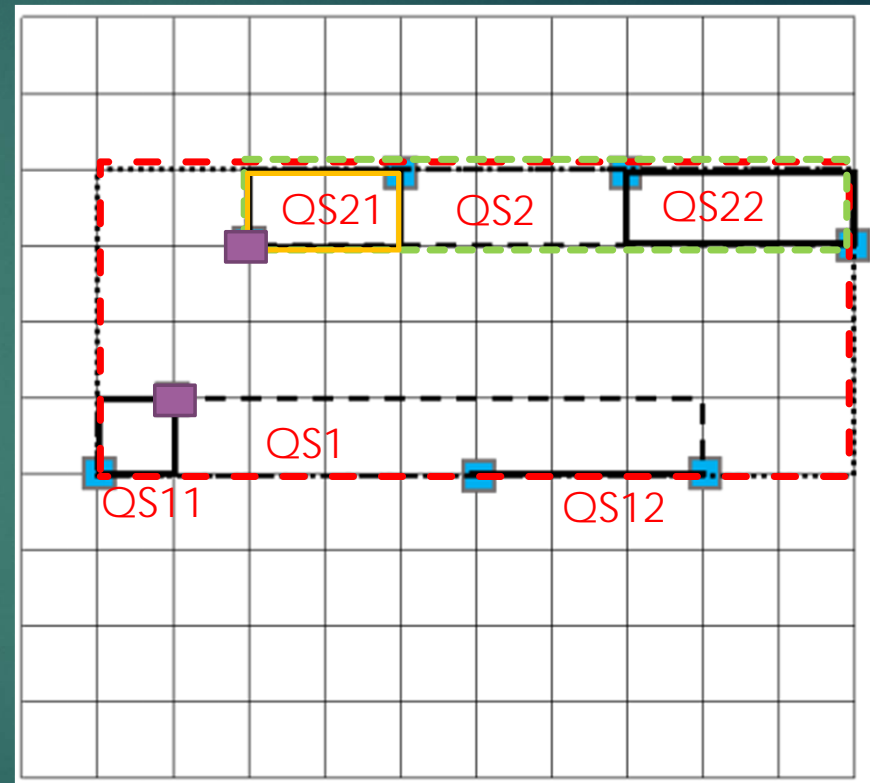
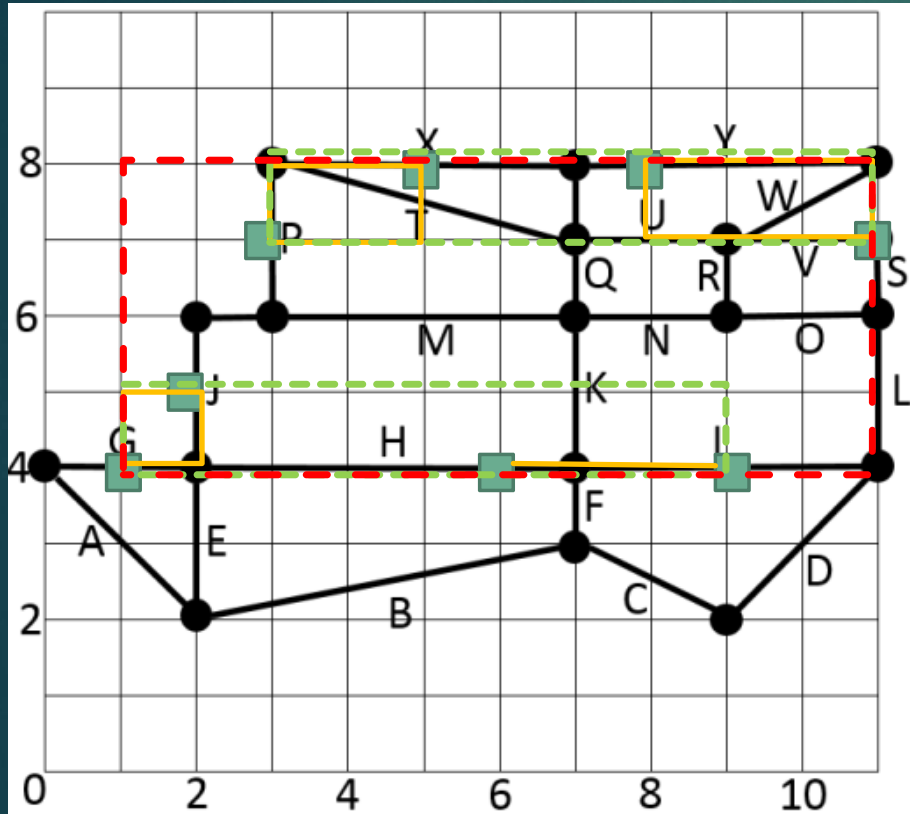
Aufruf QS12: result = {2}



Aufruf QS2: Q21= P,T,X Q22 = Q,R,S,U,V,W,Y



Aufruf Q21: result = {2,3}



Aufruf Q22: result = {2,3}

