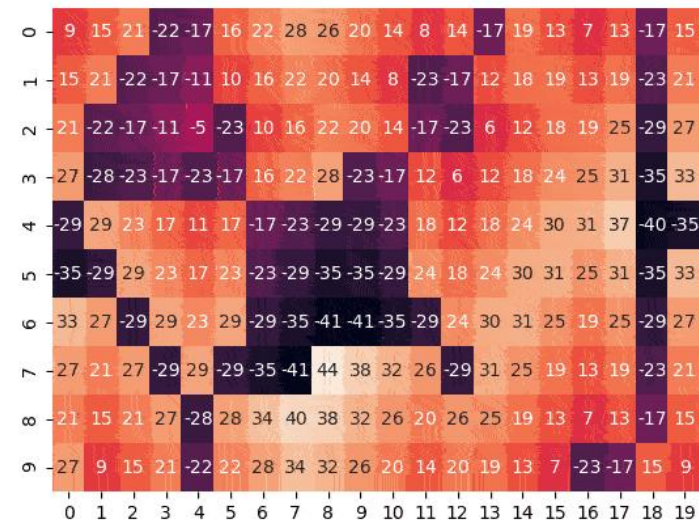
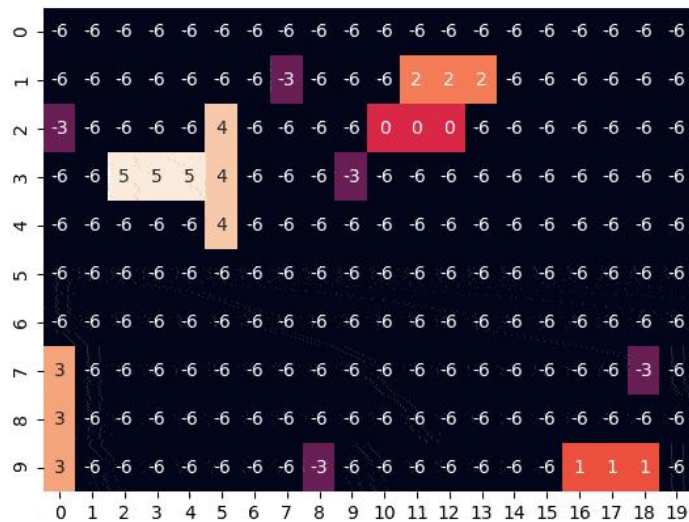


Snakes 1V1, 3V3, 2P, 5P Heuristic Algorithm

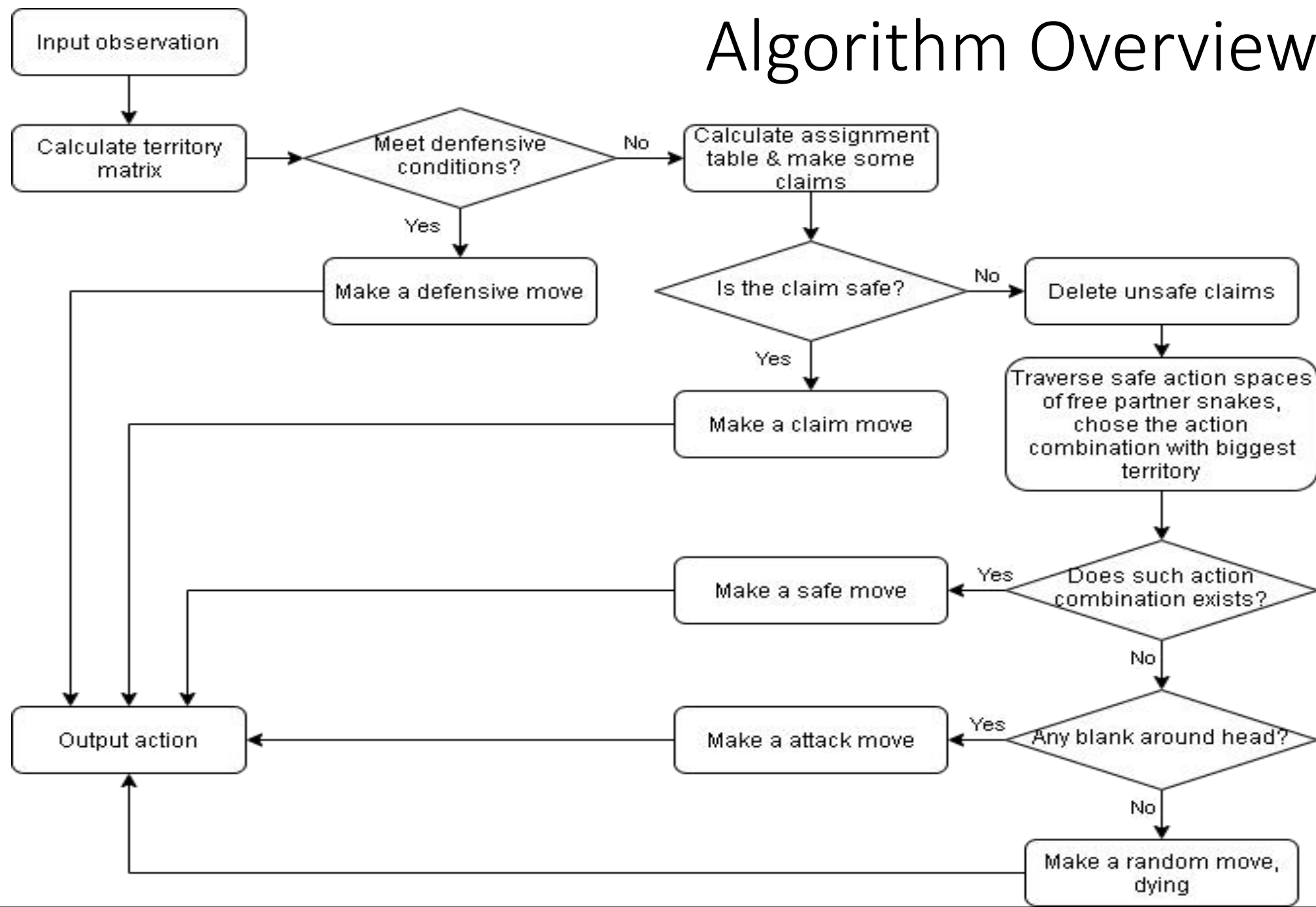
UCAS: 史雨晨 JIDI: Carlos2021



Content

1. Algorithm Overview
2. Territory Matrix
3. Assignment Table
4. Safe Action Space Traverse

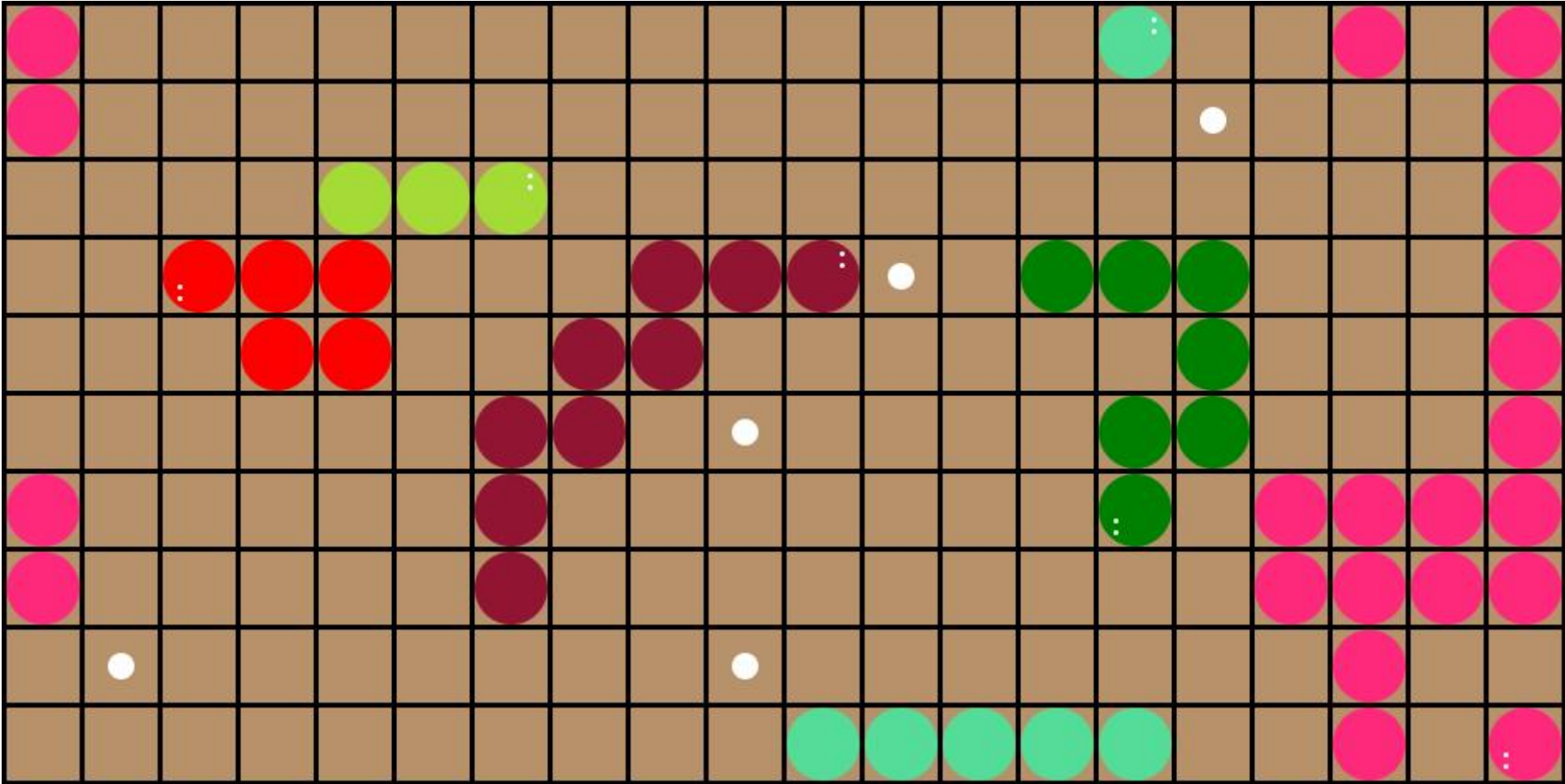
Algorithm Overview



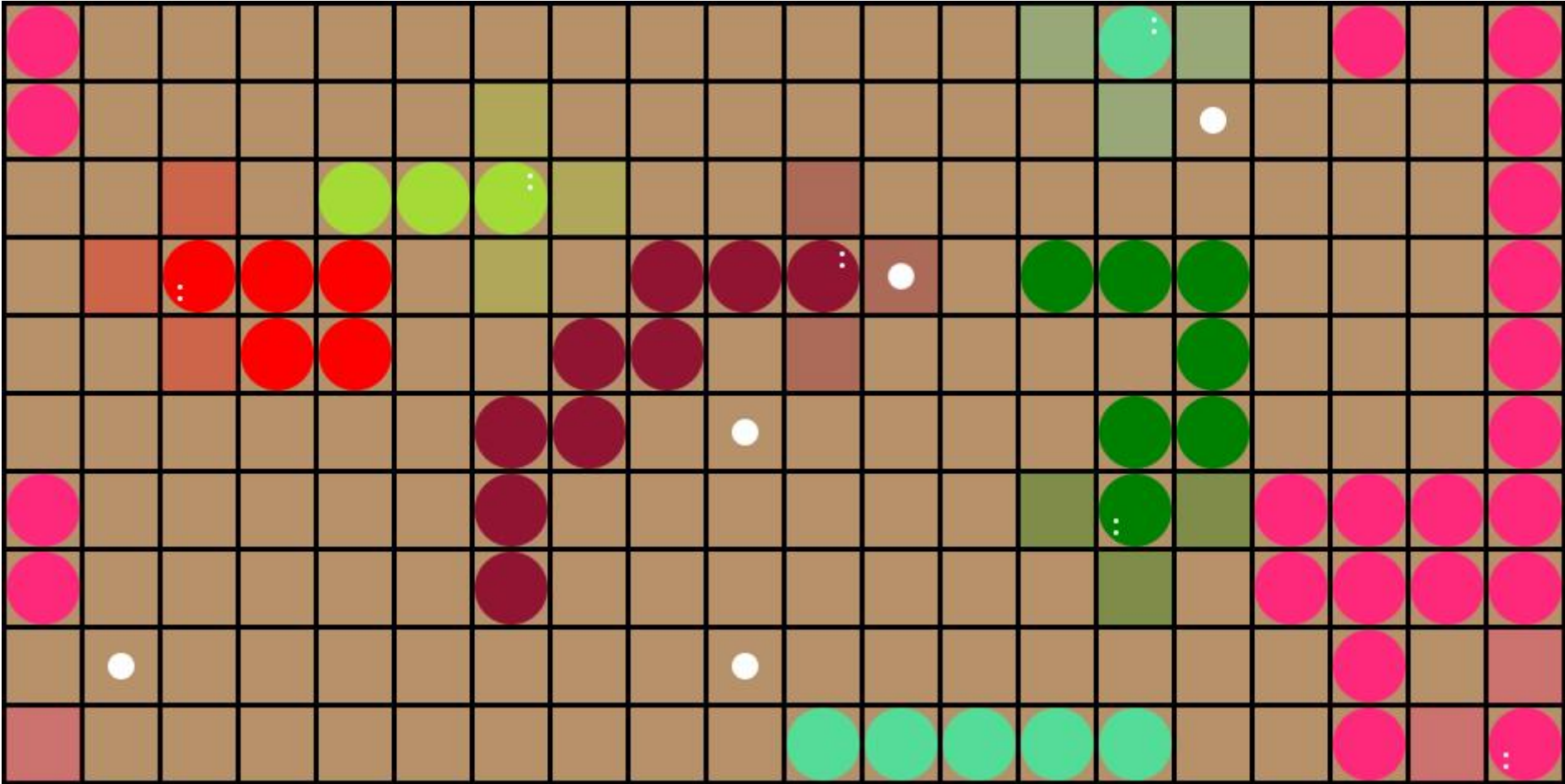
Content

1. Algorithm Overview
2. Territory Matrix
3. Assignment Table
4. Safe Action Space Traverse

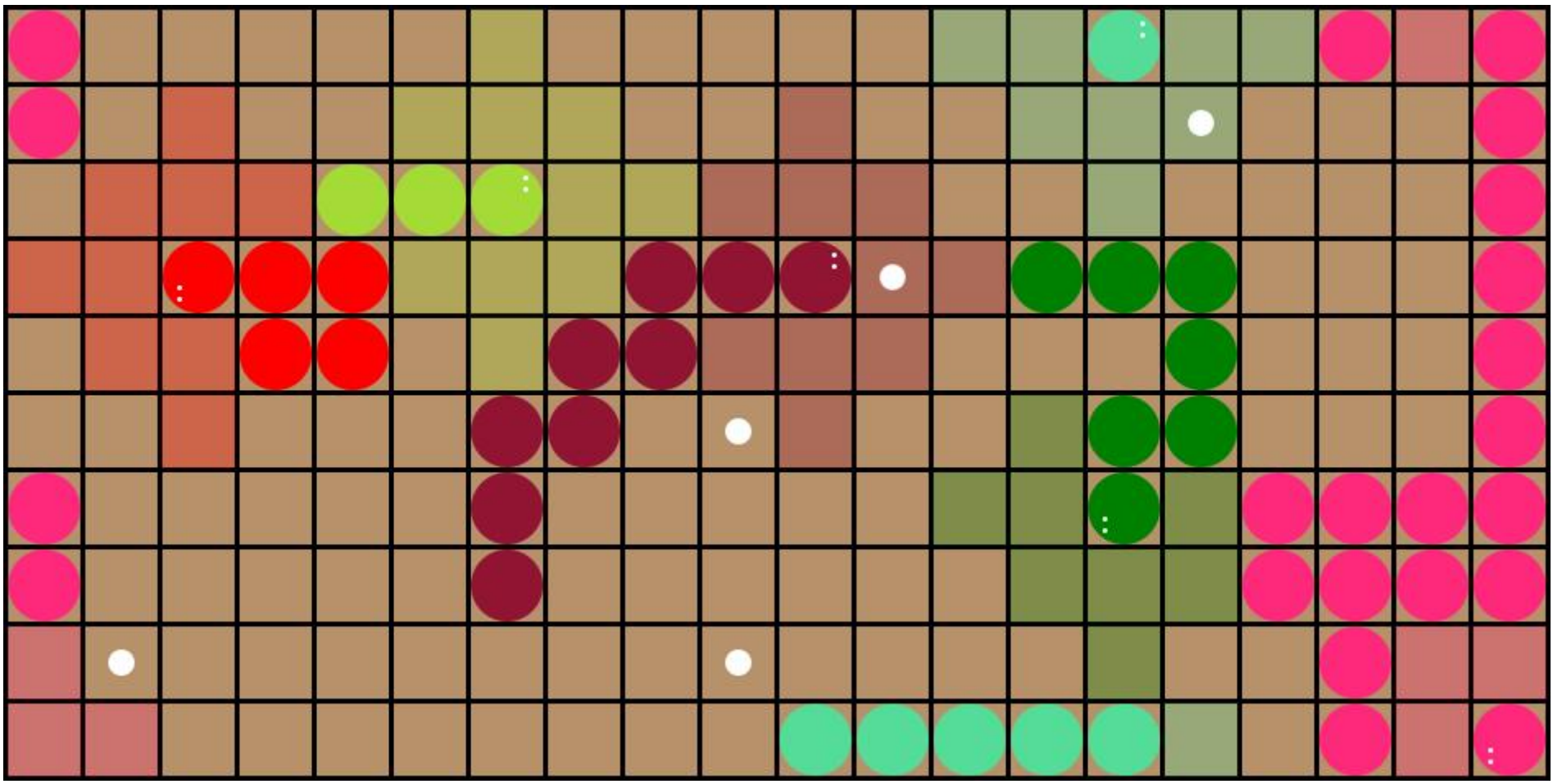
Territory Matrix: step 0



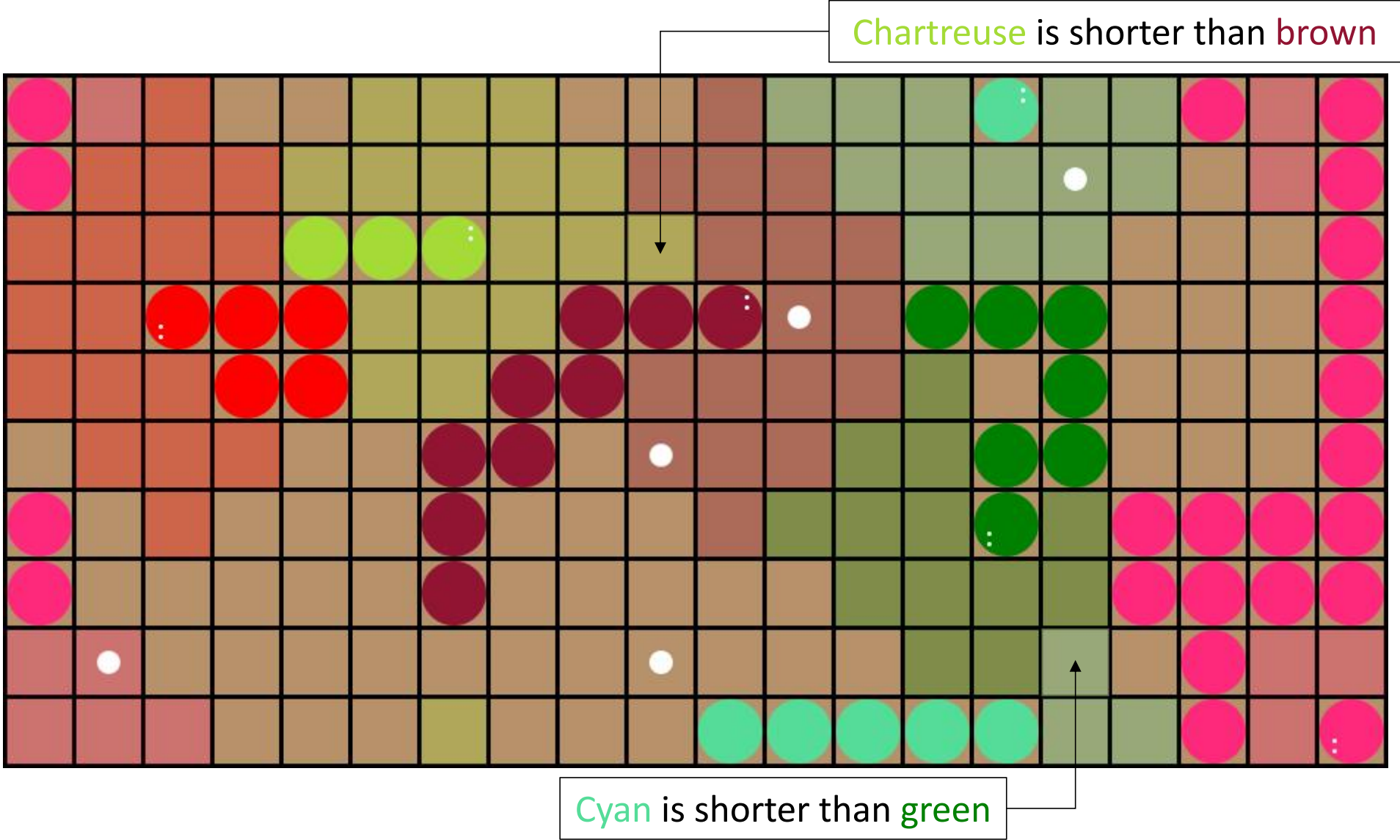
Territory Matrix: step 1



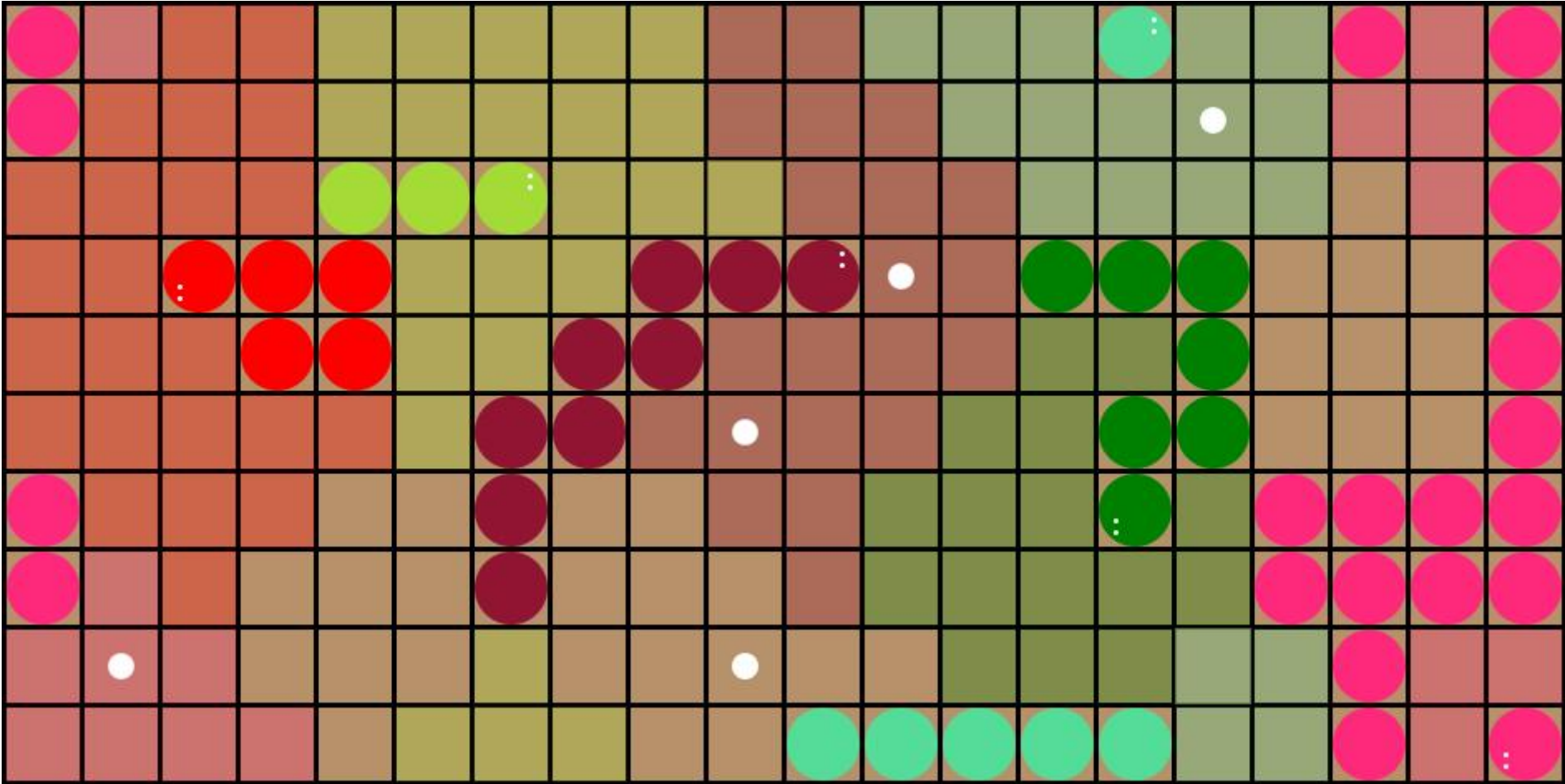
Territory Matrix: step 2



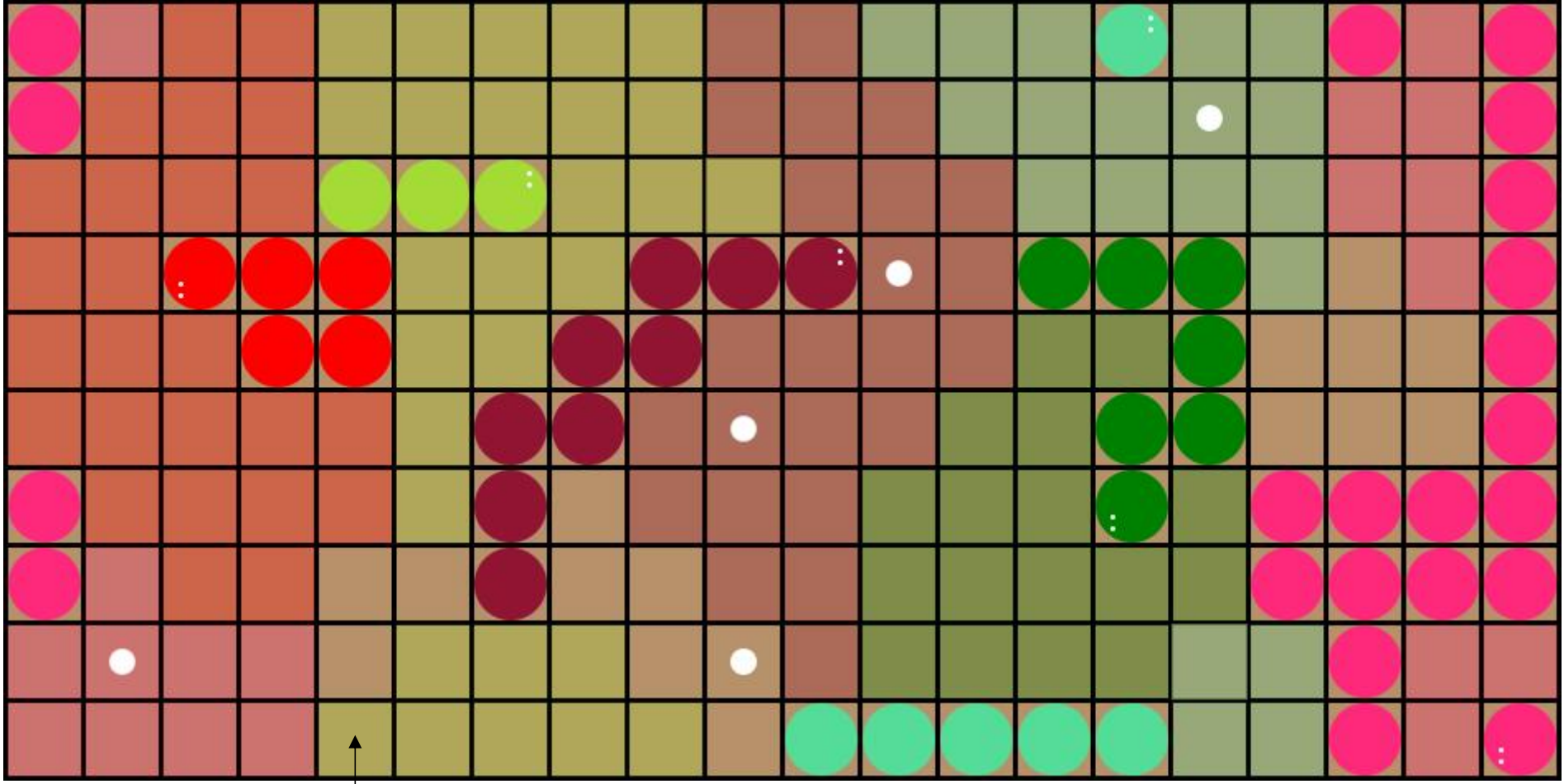
Territory Matrix: step 3



Territory Matrix: step 4



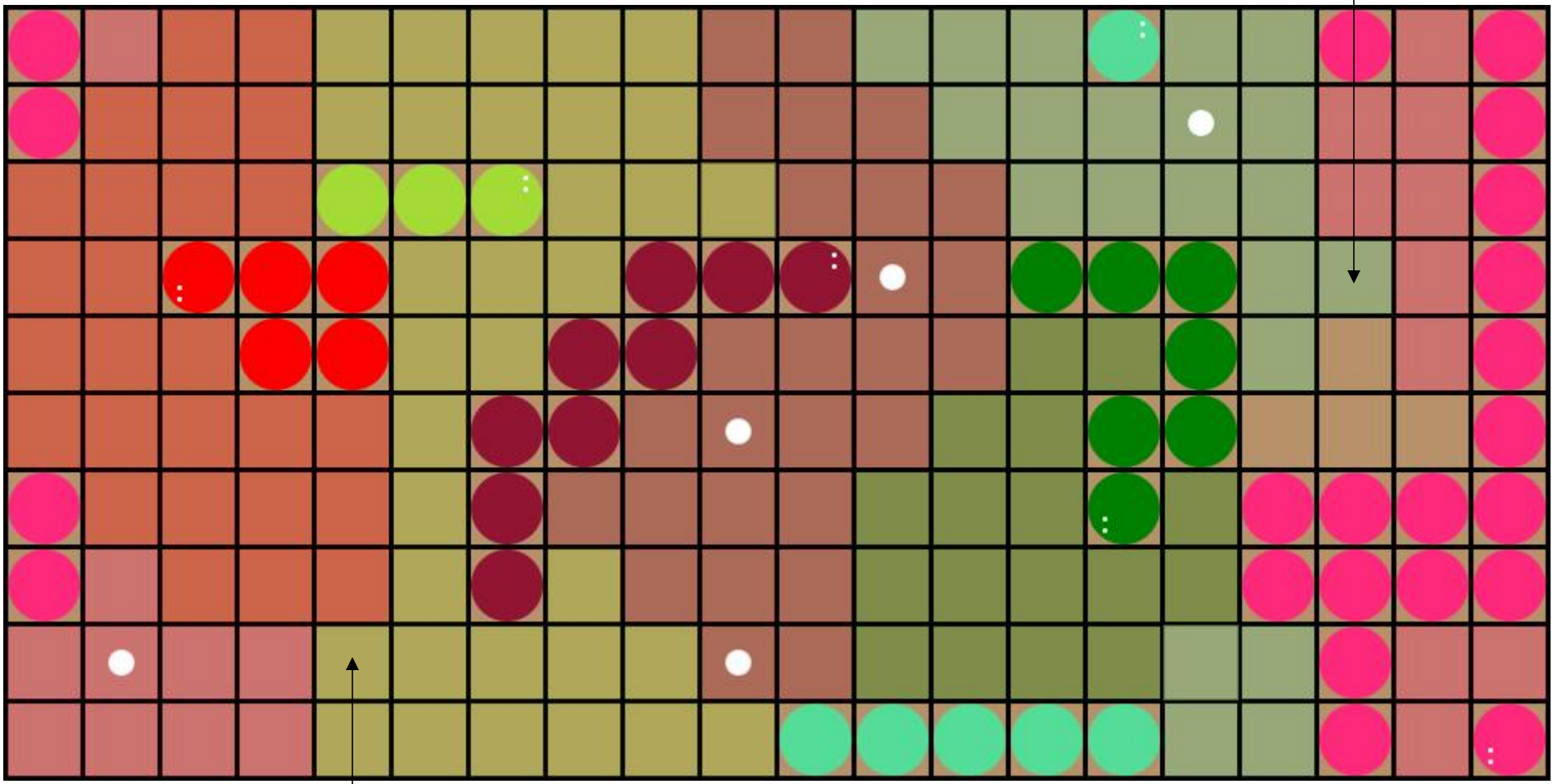
Territory Matrix: step 5



Chartreuse is shorter than pink

Territory Matrix: step 6

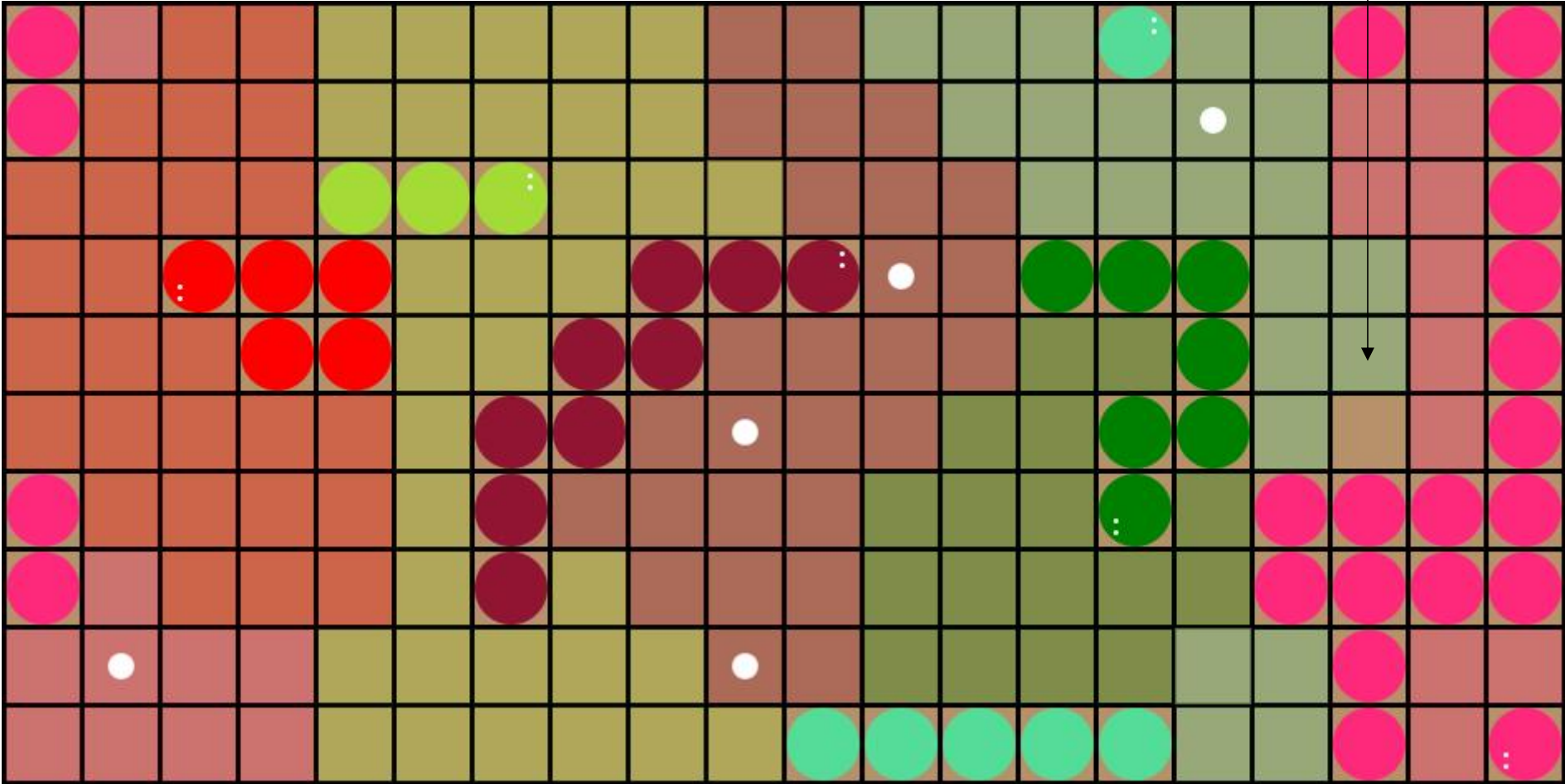
Cyan is shorter than pink



Chartreuse is shorter than pink

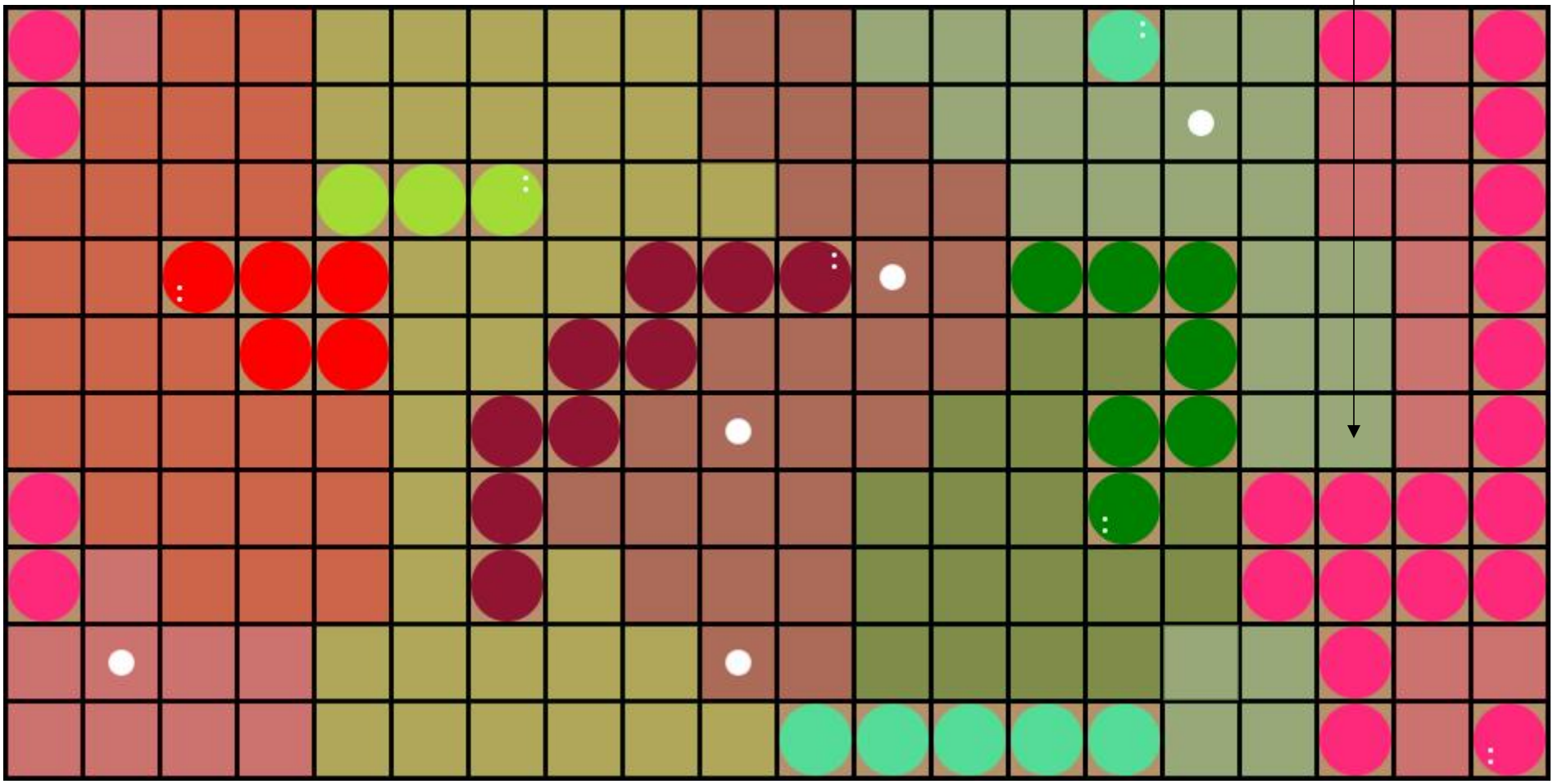
Territory Matrix: step 7

Cyan is shorter than pink

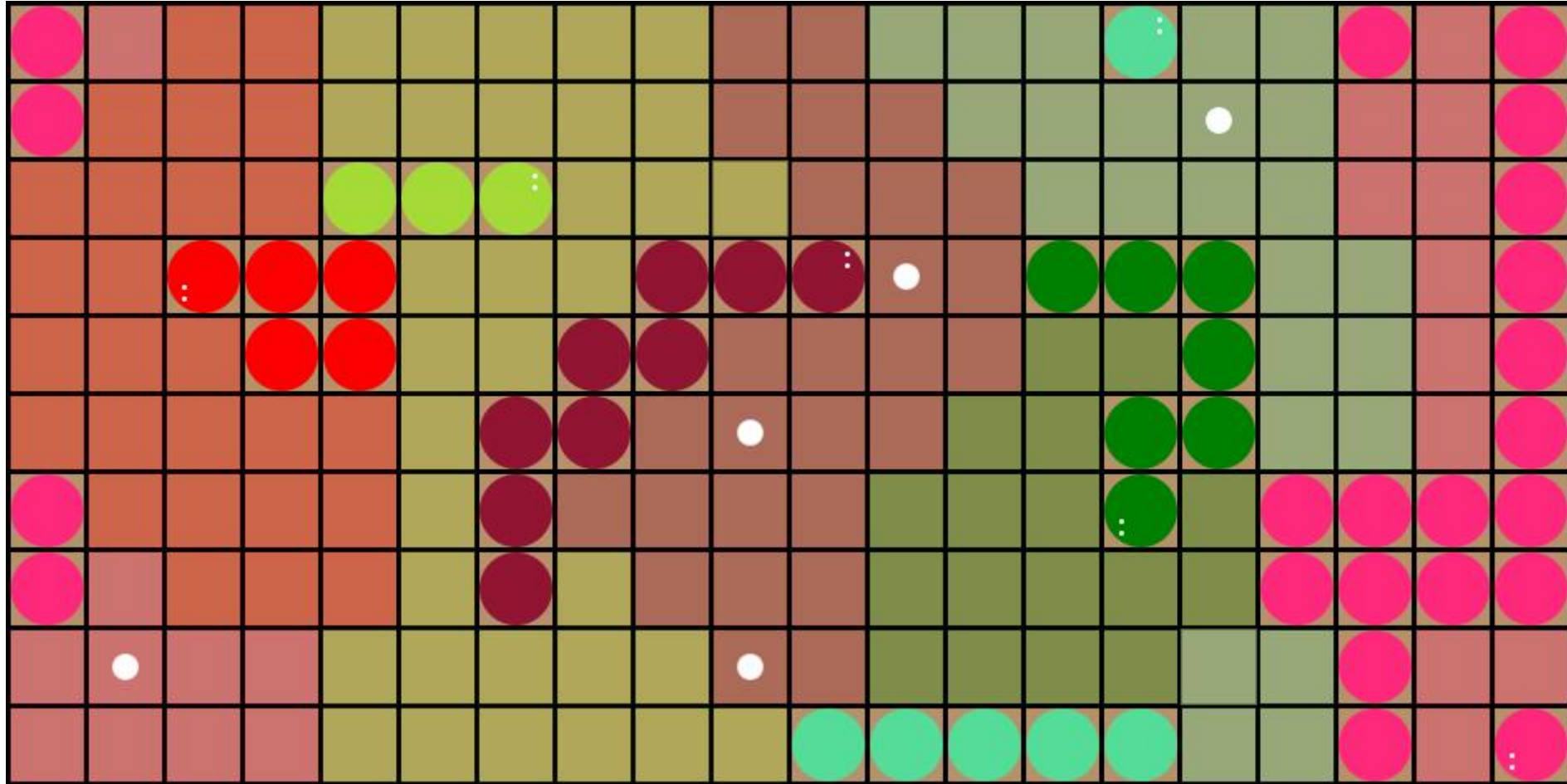
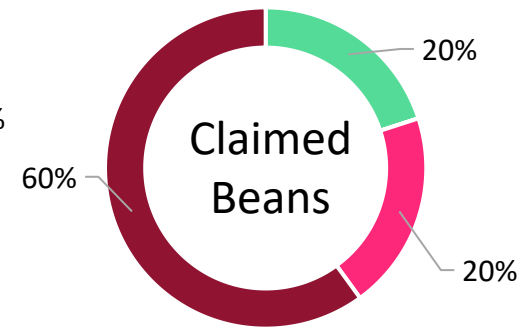
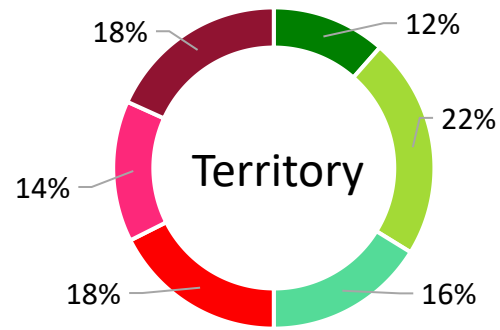


Territory Matrix: step 8

Cyan is shorter than pink



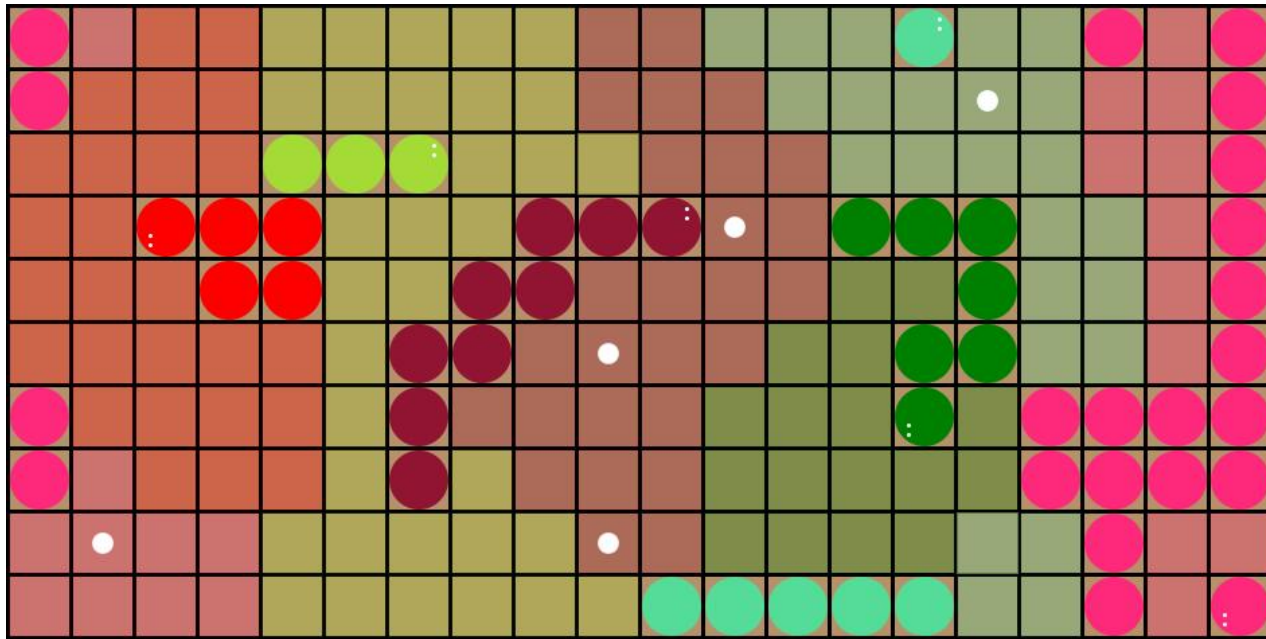
Territory Matrix



Content

1. Algorithm Overview
2. Territory Matrix
3. **Assignment Table**
4. Safe Action Space Traverse

Assignment Table



bn\snk	1	2	3	4	5	6
1			2			
2						1
3						3
4						6
5					3	

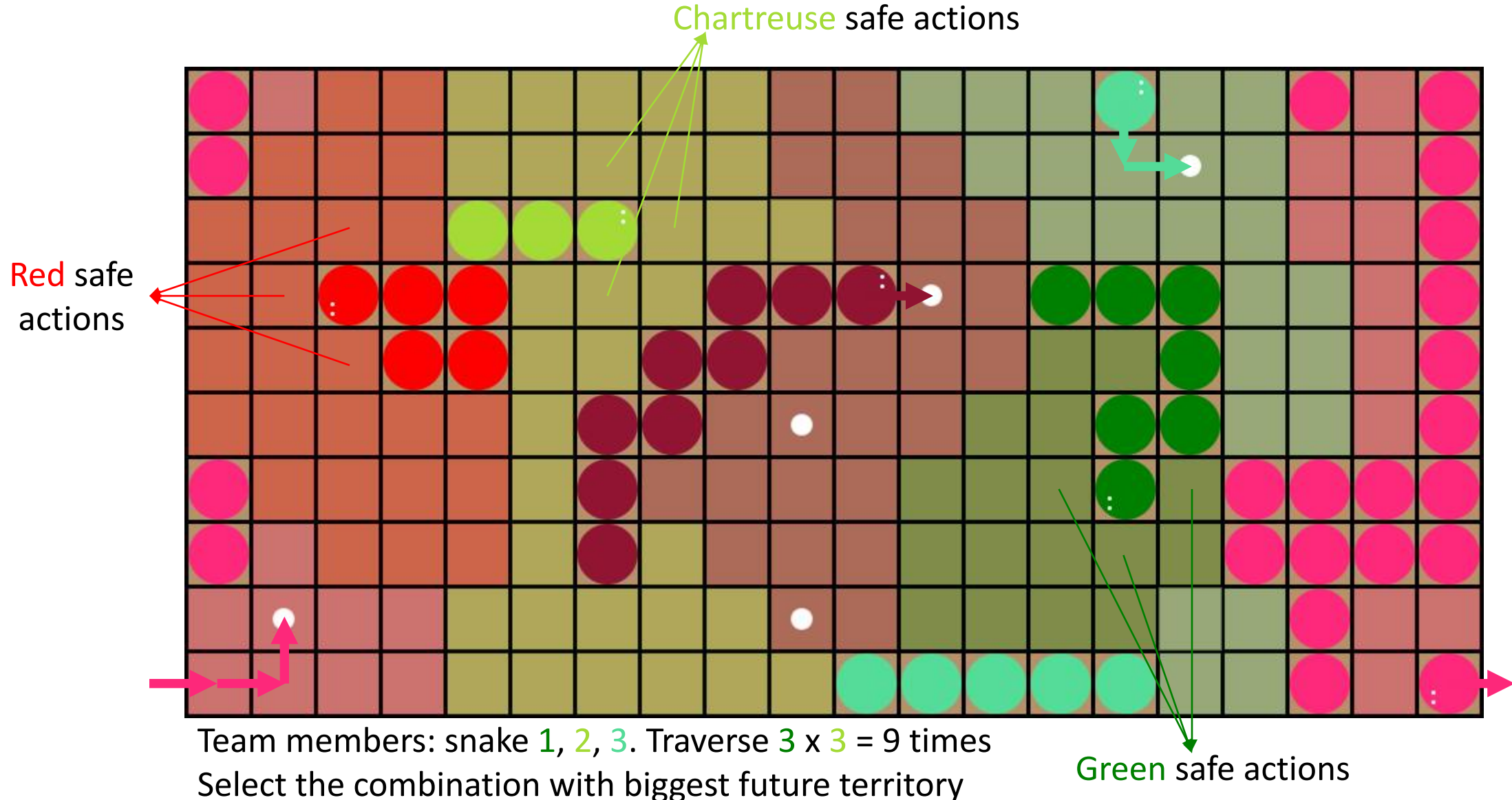
An assignment:

- snake 3 claim bean 1 within 2 steps
- snake 6 claim bean 2 within 1 step
- snake 5 claim bean 5 within 3 steps

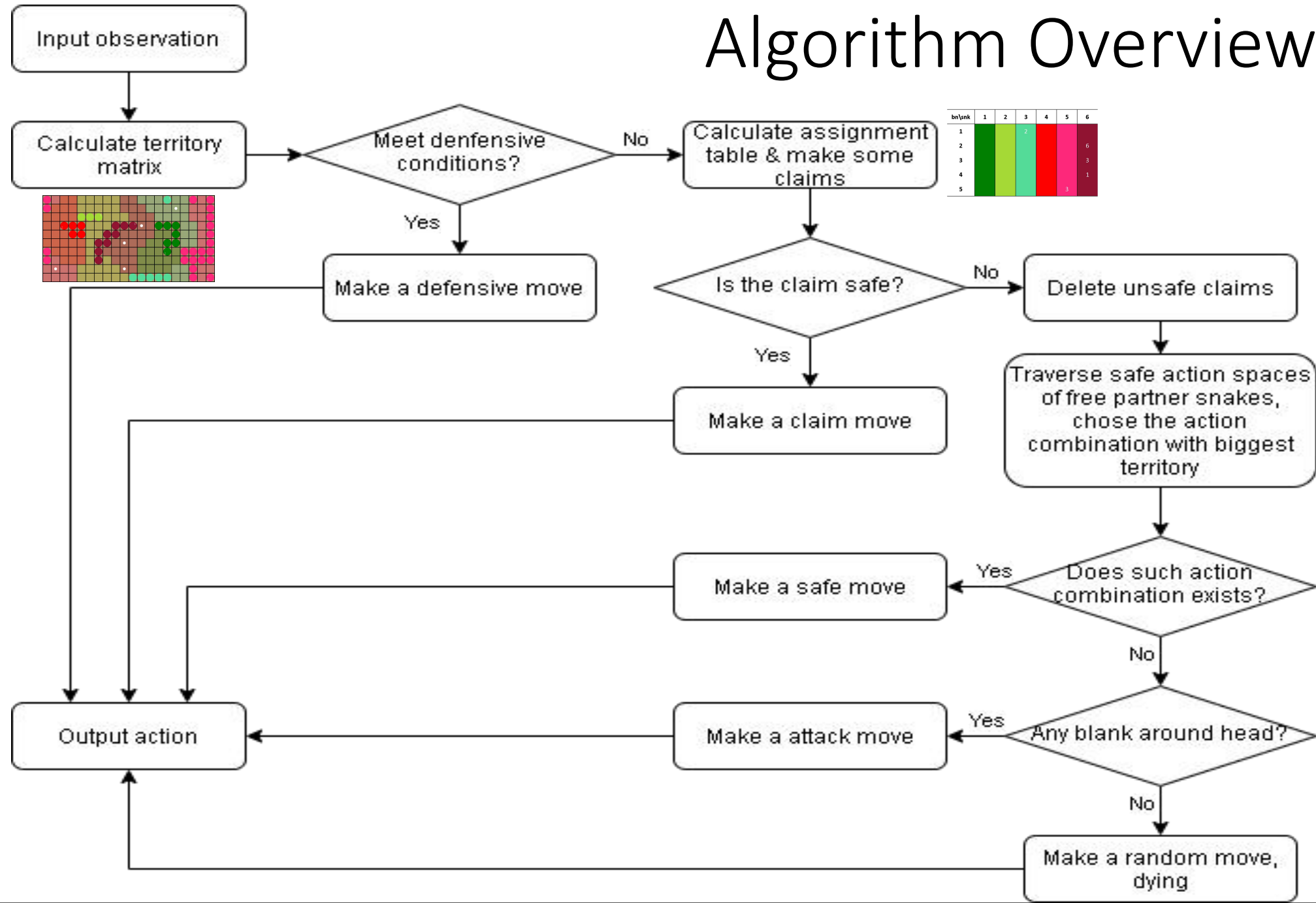
Content

1. Algorithm Overview
2. Territory Matrix
3. Assignment Table
4. Safe Action Space Traverse

Safe Action Space Traverse



Algorithm Overview



Thanks

UCAS: 史雨晨 JIDI: Carlos2021

Blog: <https://www.yuchen.xyz/2021/08/21/Jidi Snakes 3V3>

Code: https://github.com/CarlossShi/Competition_3v3snakes