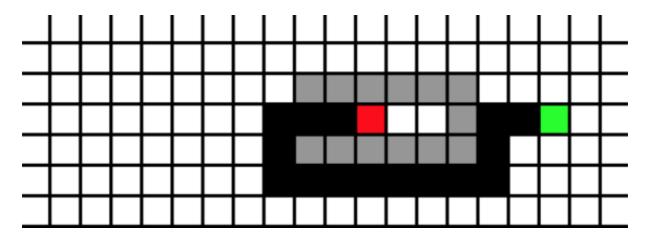
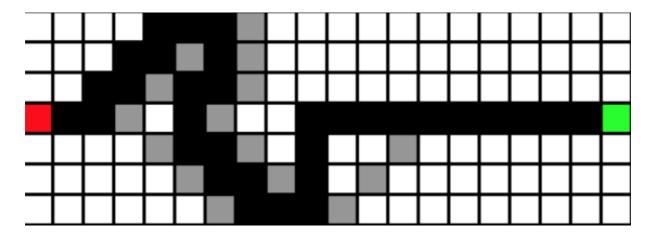
# Øving 3, Introduksjon til kunstig intelligens

# Part 1:

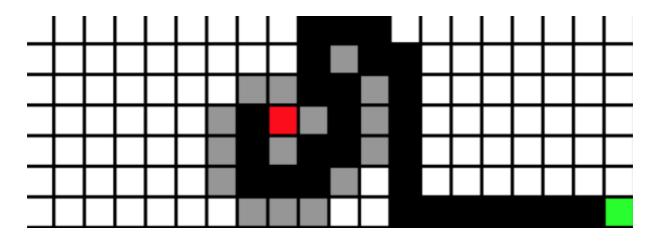
Board 1-1



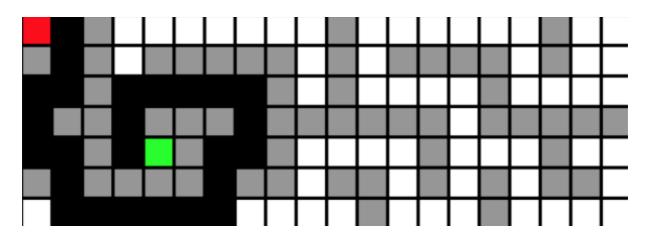
Board 1-2



Board 1-3

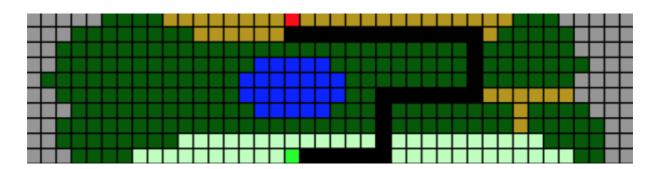


Board 1-4

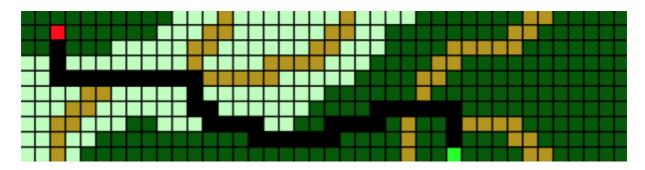


Part 2:

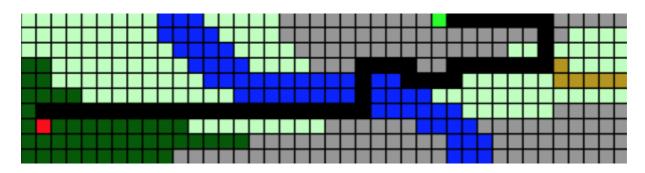
Board 2-1



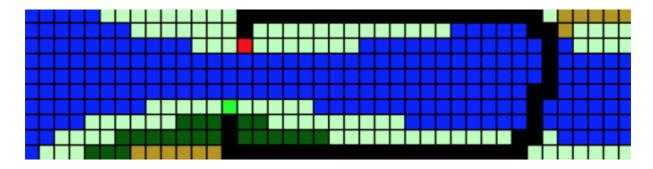
Board 2-2



Board 2-3



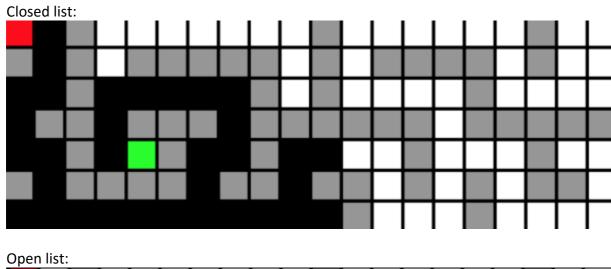
Board 2-4

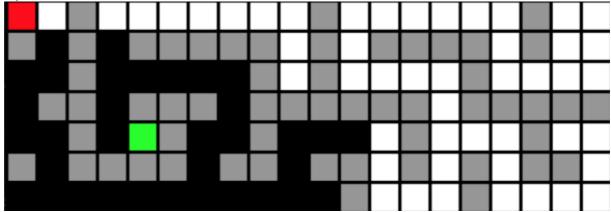


Part 3:

#### Board 1-4

**A\***:



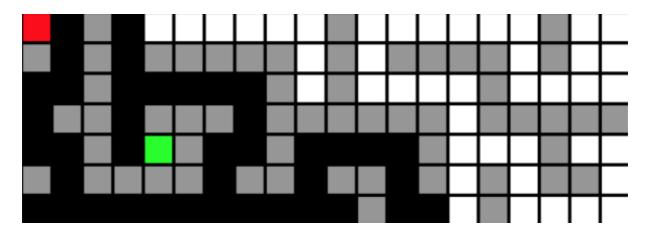


**Feilkilde:** her ser jeg at A\* leter lenge mot høyre, noe som jeg vil anta den ikke skal gjøre. Mulig det er en bug i koden som jeg ikke finner som er forklaringen på dette.

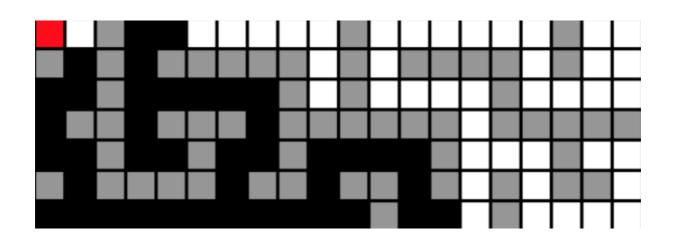
Dijkstra:

Løsning:

#### Closed list:



# Open list:

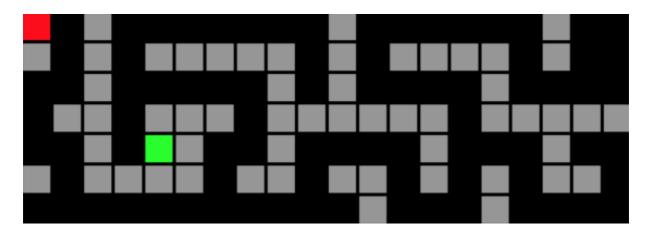


#### BFS:

#### Open list:



#### Closed list:

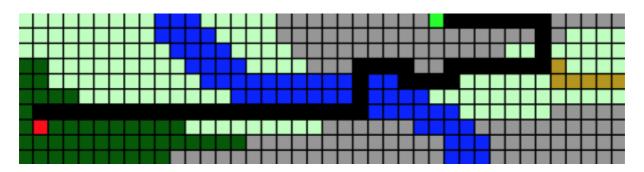


Her er det ikke like store forskjeller mellom A\* og Dijkstra, men fra de to til BFS ser vi en stor forskjell. I og med at A\* har kunnskap (heuristikk) om hvor målet befinner seg finner den fortere veien

#### Board 2-3:

**A\***:

Løsning:



Open list:

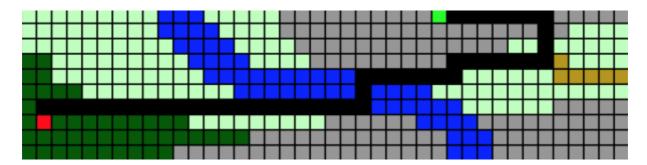


### Closed list:



# Dijkstra:

# Løsning:



# Open list:

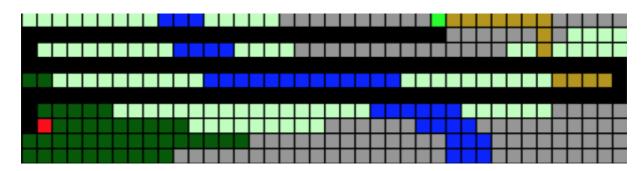


### Closed list:

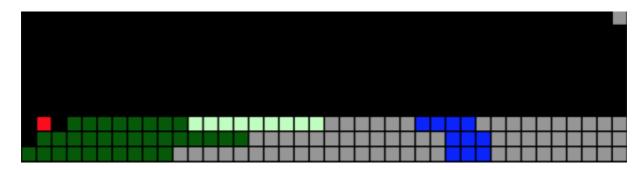


BFS:

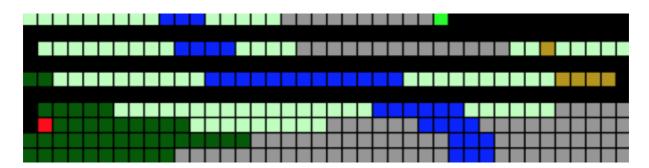
Løsning:



#### Open list:



#### Closed list:



Her ser vi at både A\* og Dijkstra leter mer i riktig retning, mens BFS leter vilkårlig. Hvilken algoritme som bruker minst ressurser avhenger litt av hvilket brett (verden) som sendes inn.

Kommentar: Det er mulig det er noe med koden min som gjør at dette ikke blir riktig. Uten noen fasit-brett er det vanskelig å vite om det er riktig eller ikke.