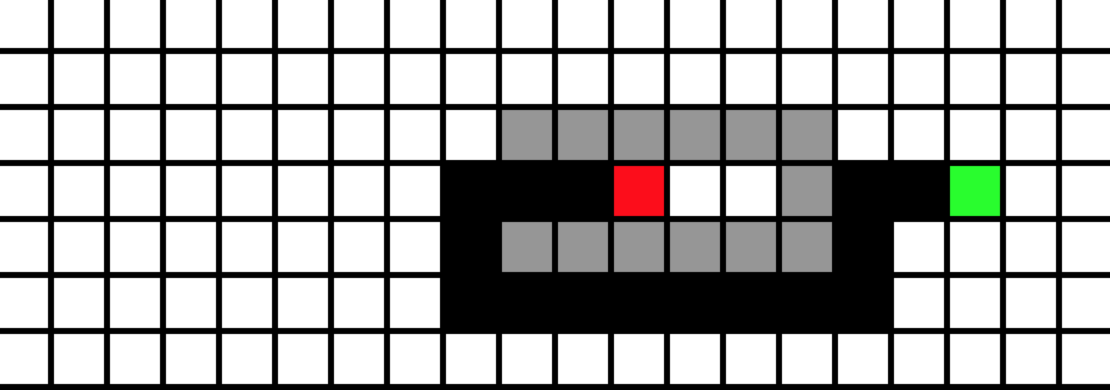
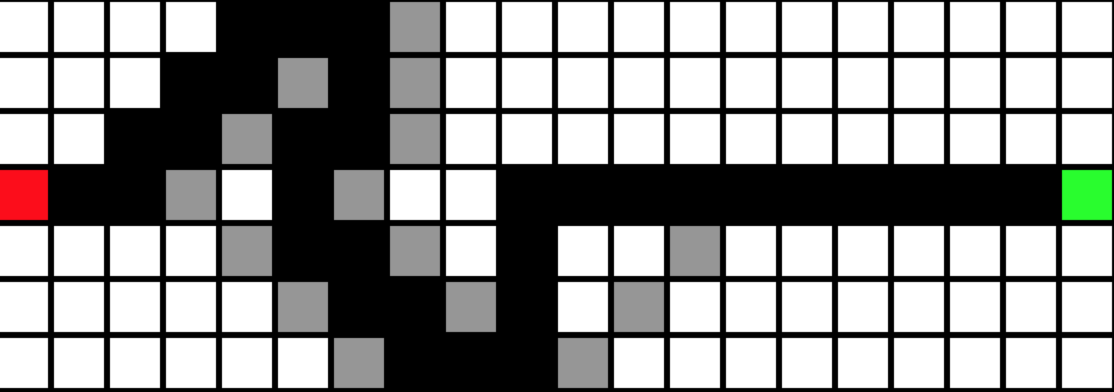
Øving 3, Introduksjon til kunstig intelligens

# Part 1:

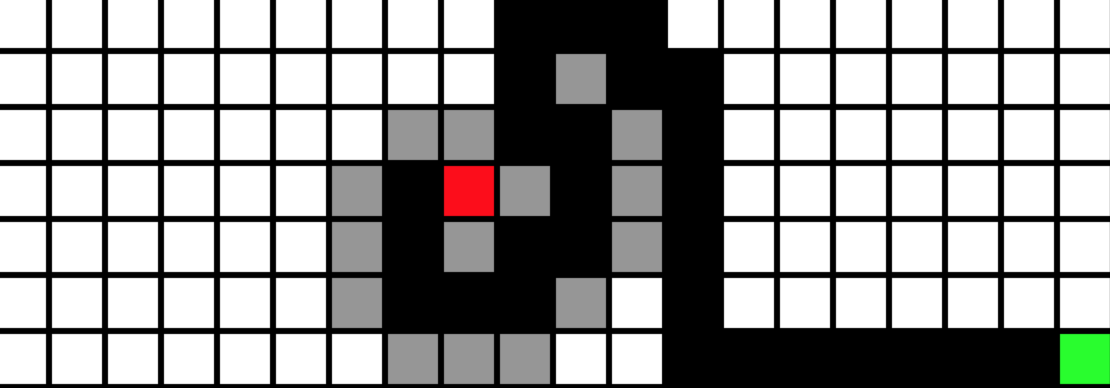
**Board 1-1**



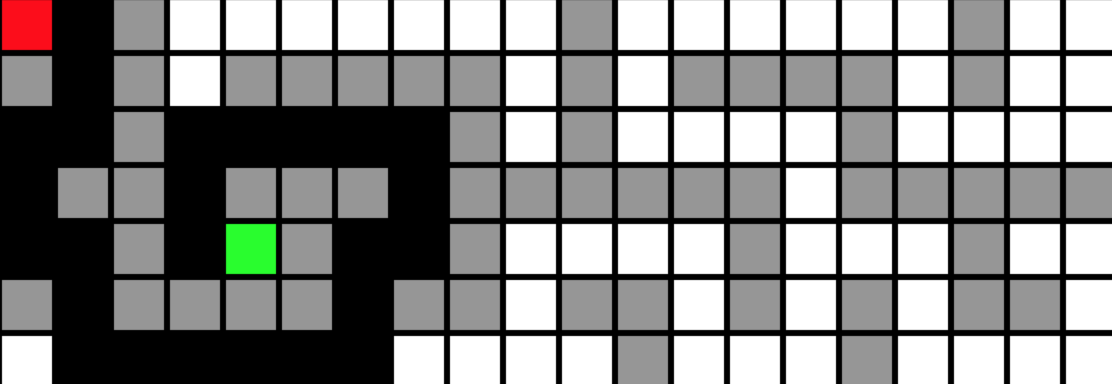
**Board 1-2**

****

**Board 1-3**

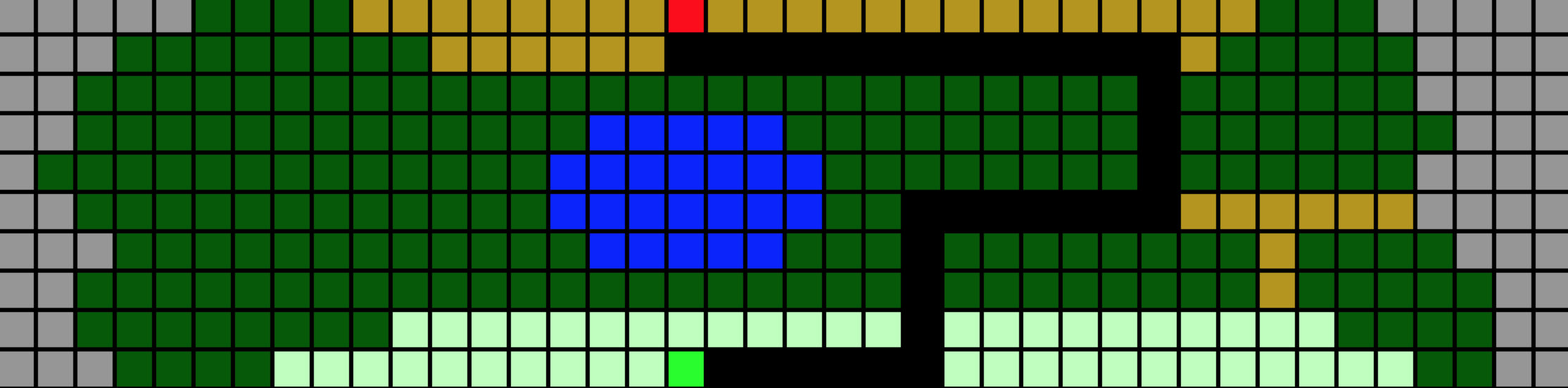
****

**Board 1-4**

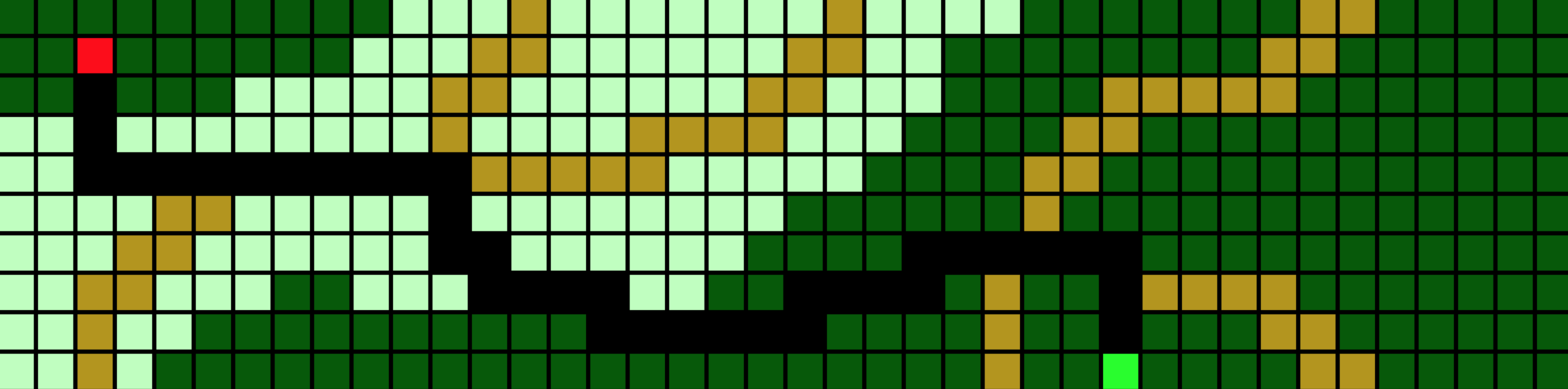
****

## Part 2:

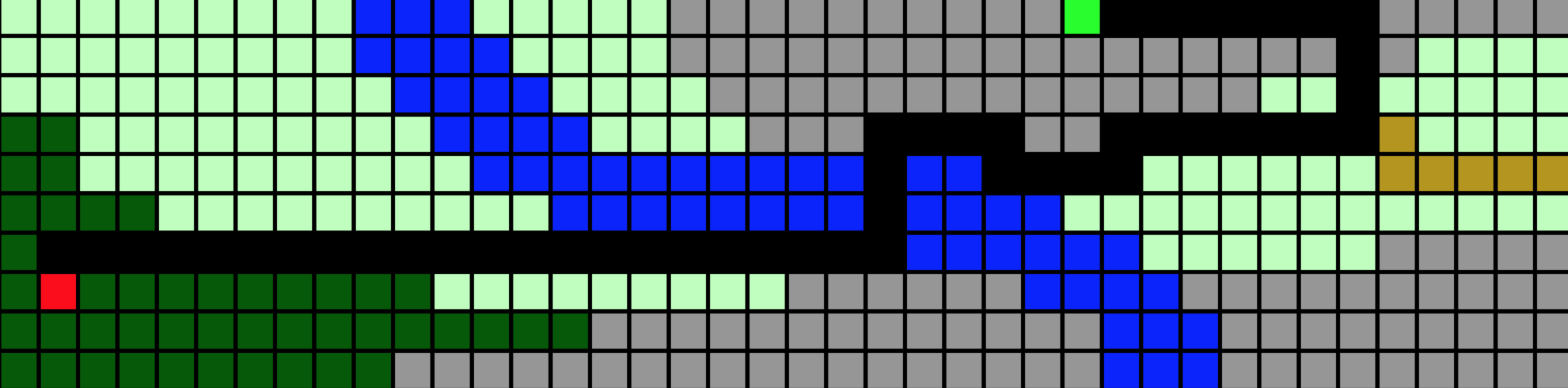
**Board 2-1**

****

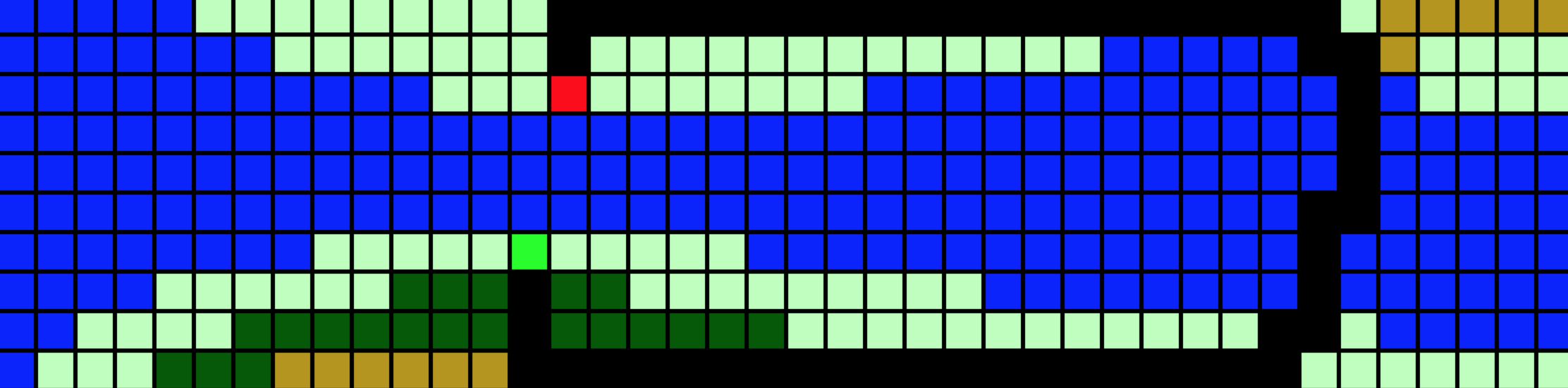
**Board 2-2**

****

**Board 2-3**

****

**Board 2-4**

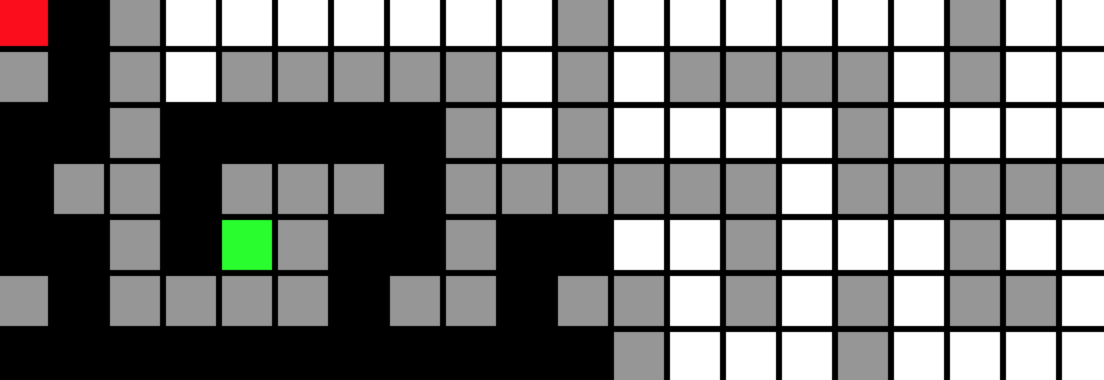
****

## Part 3:

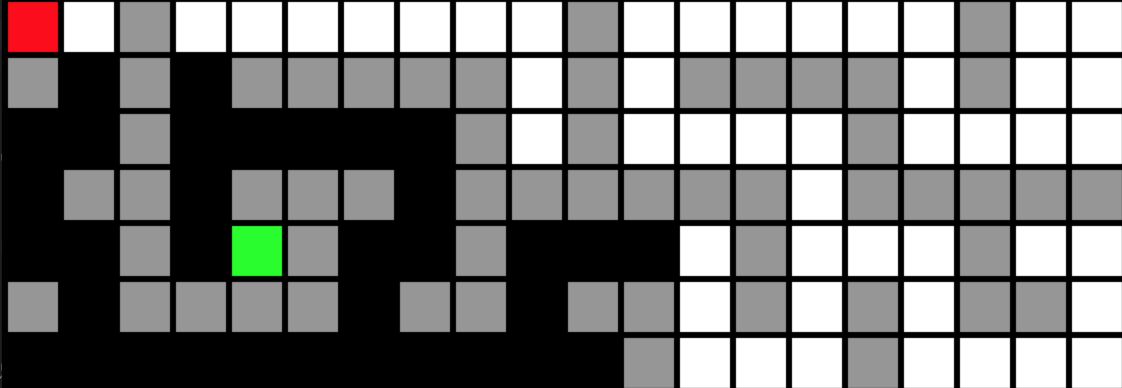
**Board 1-4**

**A\*:**

Closed list:



Open list:

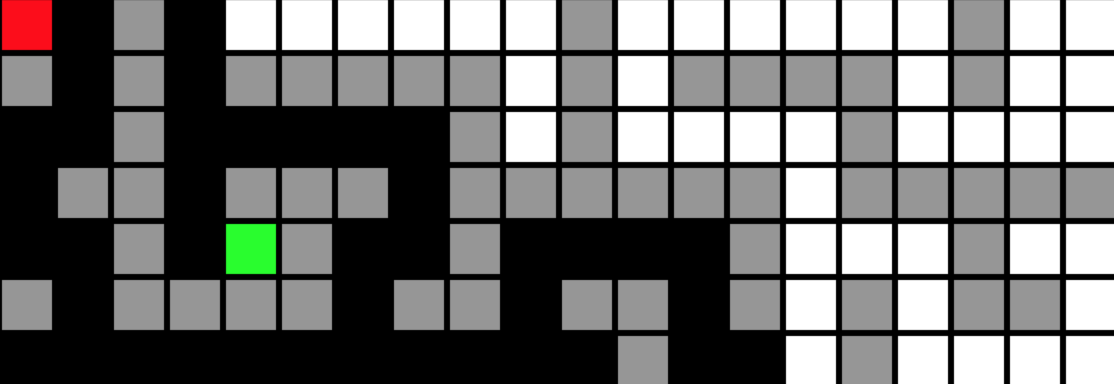


**Feilkilde:** her ser jeg at A\* leter lenge mot høyre, noe som jeg vil anta den ikke skal gjøre. Mulig det er en bug i koden som jeg ikke finner som er forklaringen på dette.

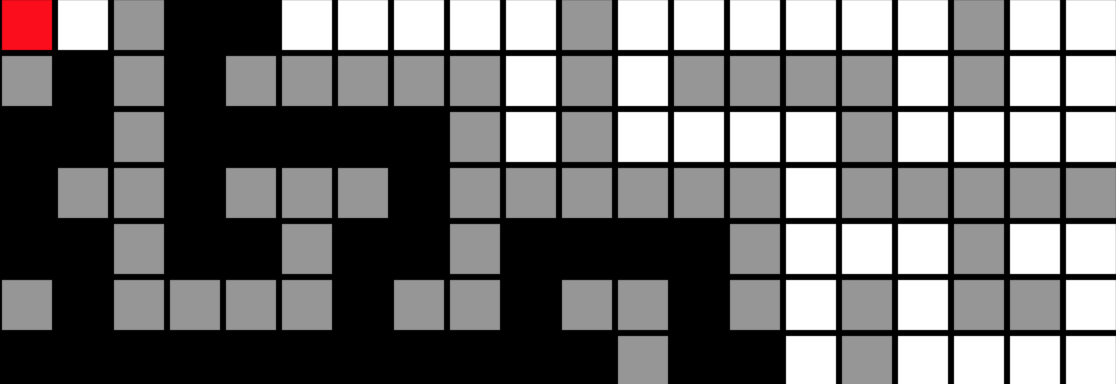
**Dijkstra:**

Løsning:

Closed list:

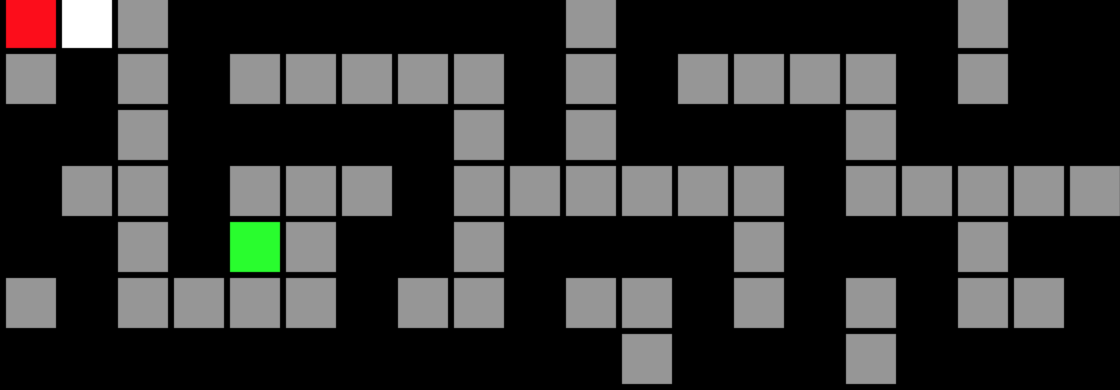


Open list:

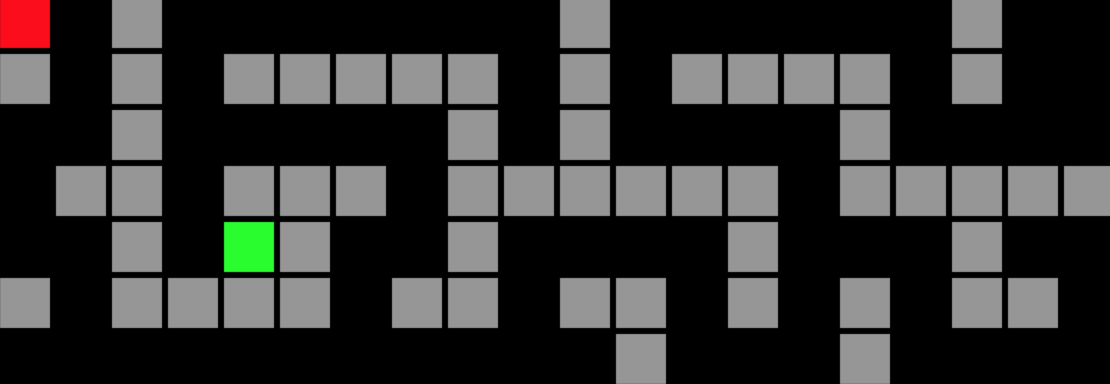


**BFS:**

Open list:



Closed list:

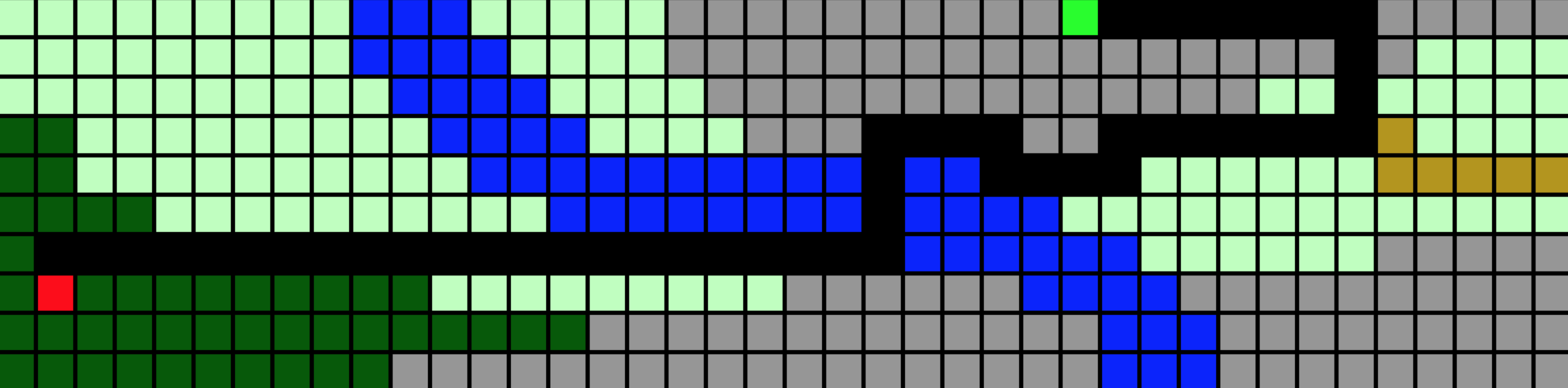


Her er det ikke like store forskjeller mellom A\* og Dijkstra, men fra de to til BFS ser vi en stor forskjell. I og med at A\* har kunnskap (heuristikk) om hvor målet befinner seg finner den fortere veien

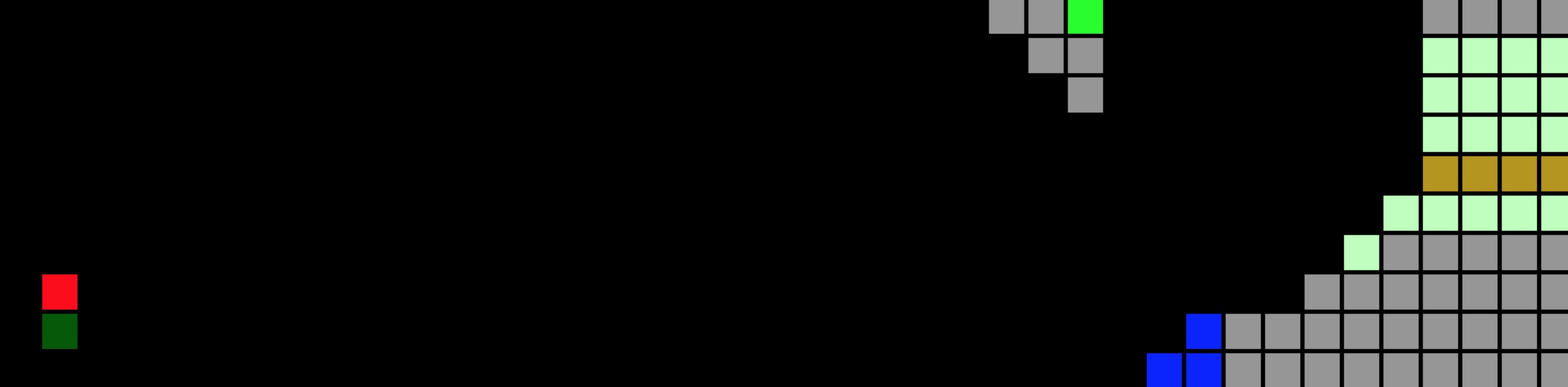
**Board 2-3:**

**A\*:**

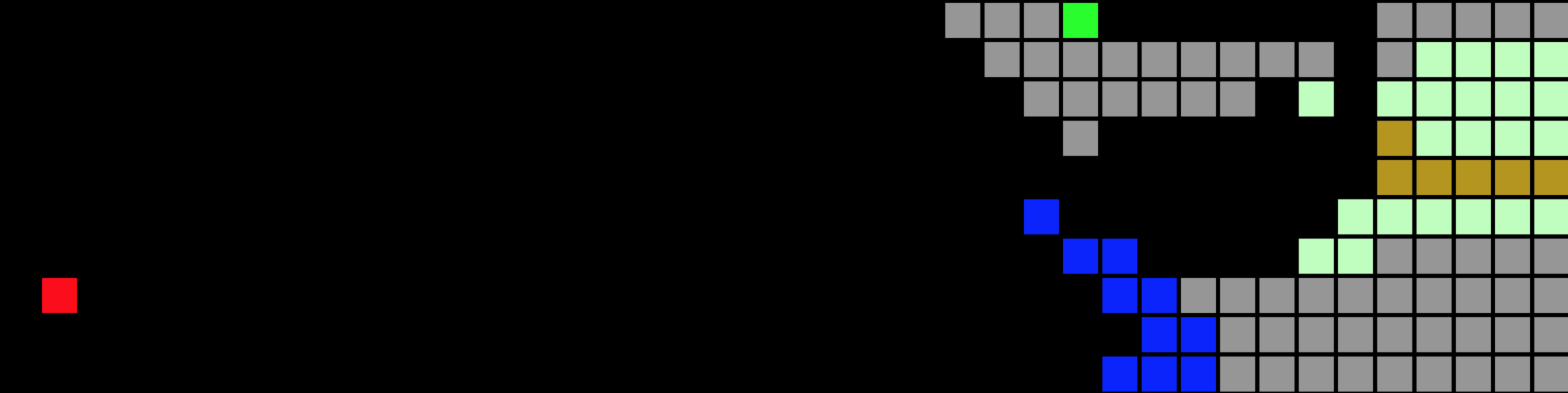
Løsning:



Open list:

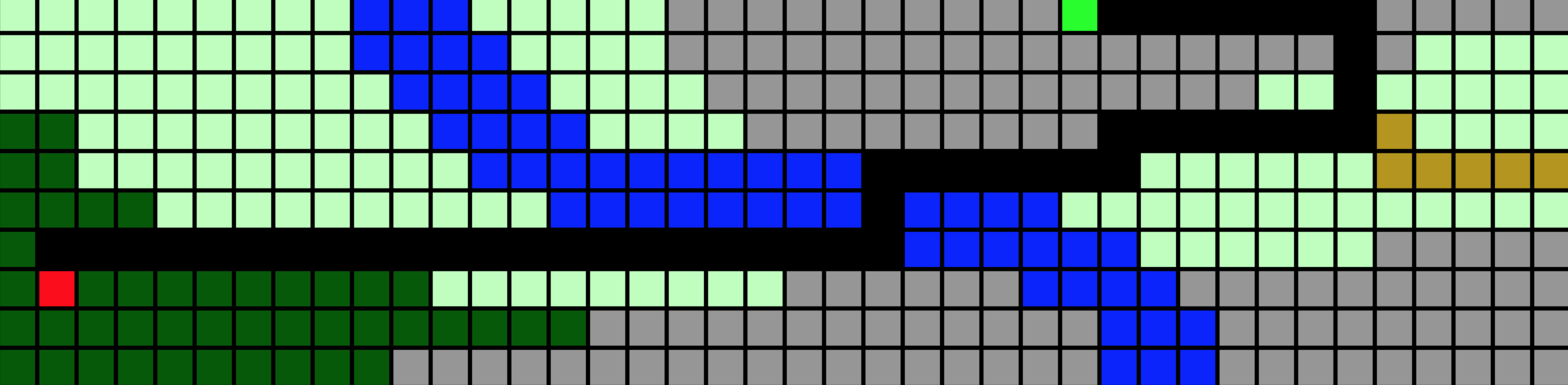


Closed list:

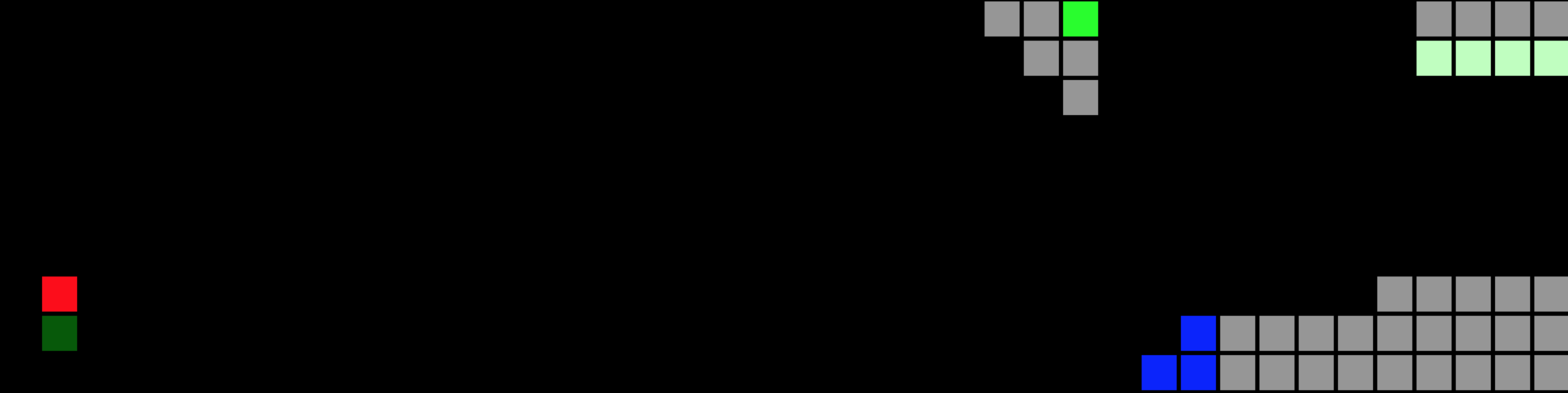


**Dijkstra:**

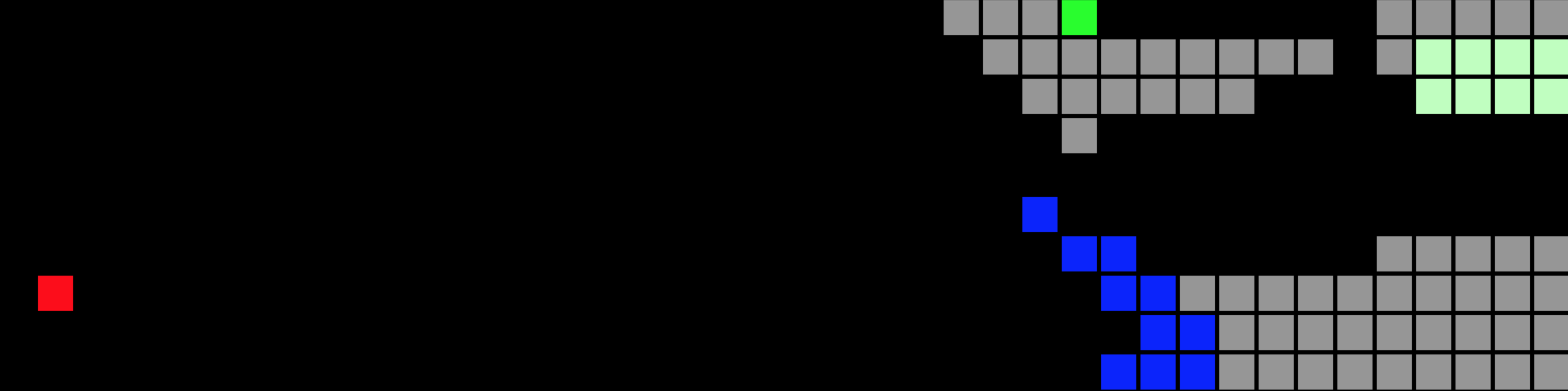
Løsning:



Open list:

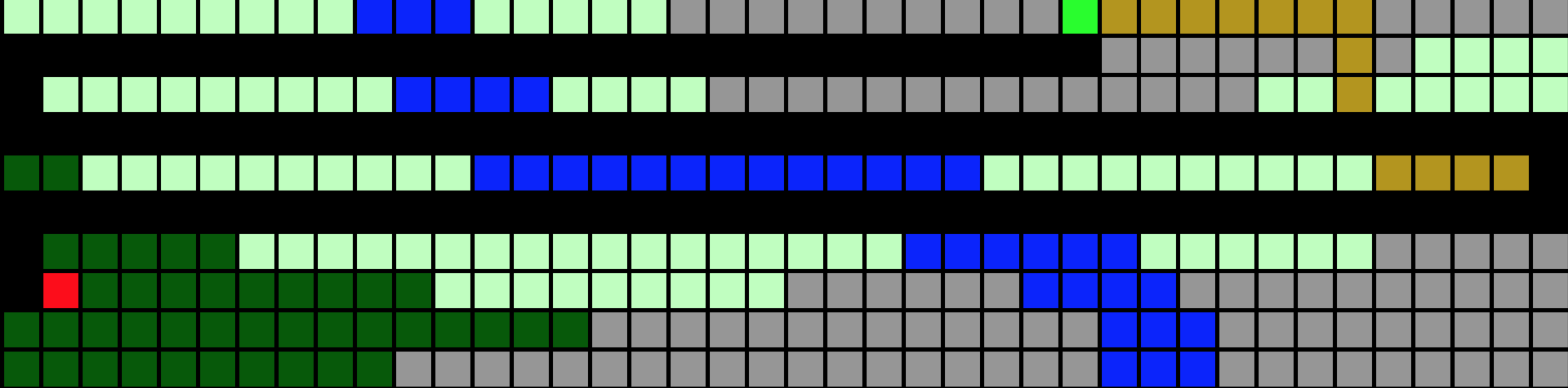
****

Closed list:

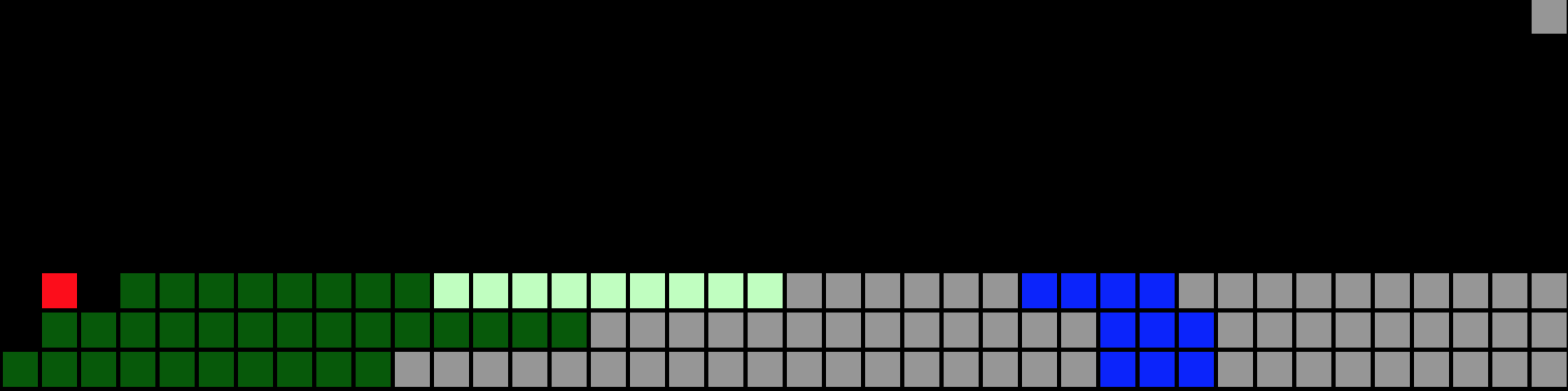


**BFS:**

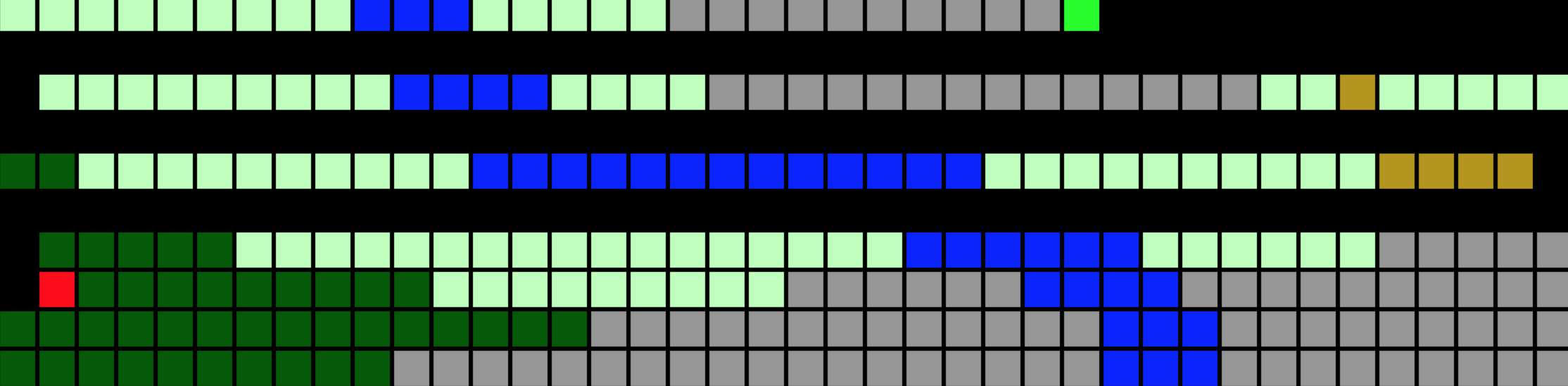
Løsning:



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.