

- **1 player game**
- **Simple behaviour**
- **Score update at each move**
- **Large state space**

THE GAME “2048”

2048

SCORE

0

HIGH SCORE

56688



			2
	2		

ARROWBLEN

2048

SCORE

0

HIGH SCORE

56688



2

2

2048

SCORE

0

HIGH SCORE

56688



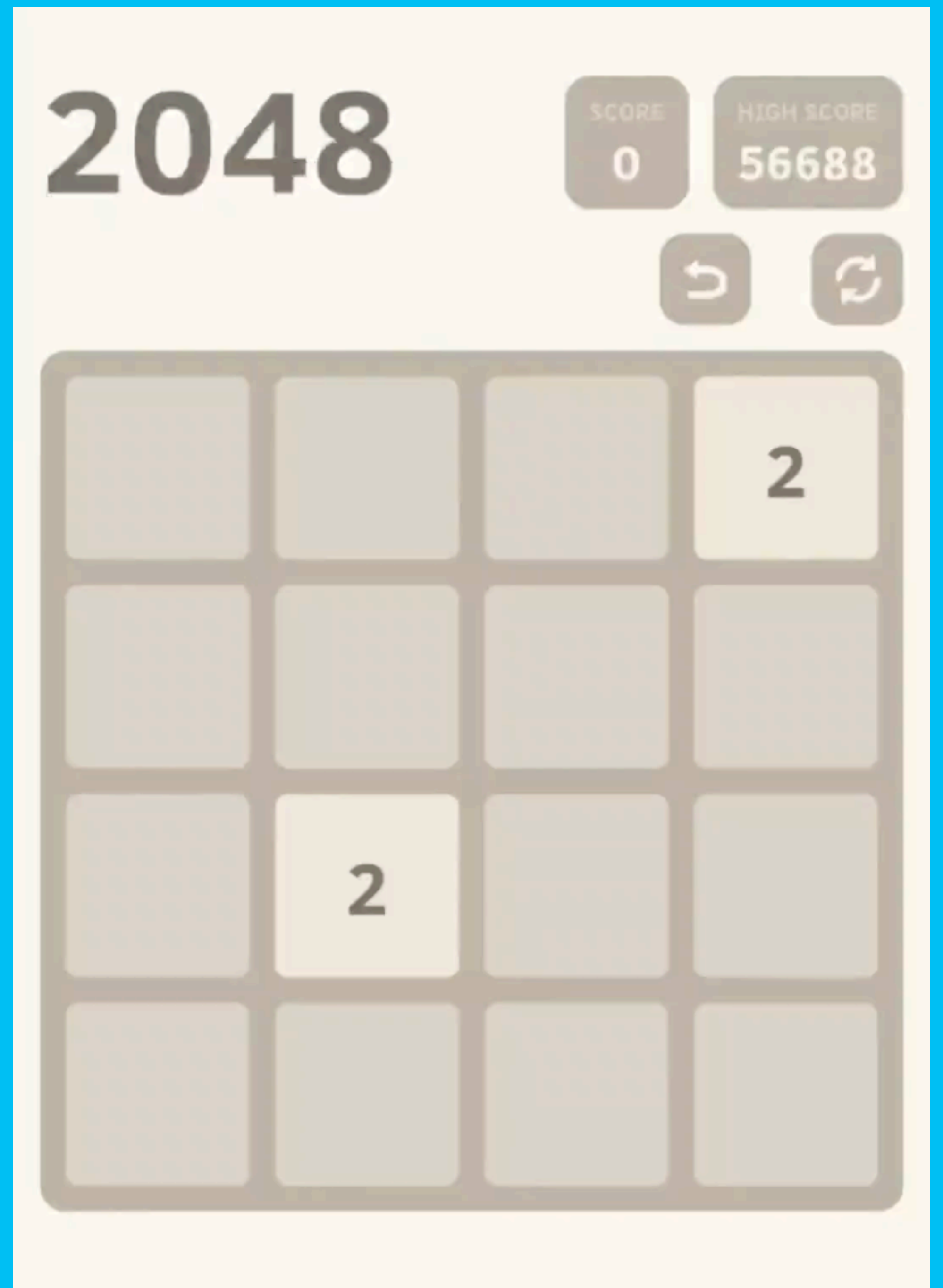
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A PROBLEM

THE GAME “2048”

- 1 player game
- Simple behaviour
- Score update at each move
- Large state space



DEEP REINFORCEMENT LEARNING

A BASIC ALGORITHM

- Play 100 **random moves**, and store the results
- Train a **neural net** on those 100 observations:
 - **features** = a 2048 grid & a move
 - **target** = the score
- Play 100 new moves:
 - 50% at **random**
 - 50% using the **neural net**
- **Re-train** the neural net on those new observations
- **Repeat** those steps (“reinforce”)

