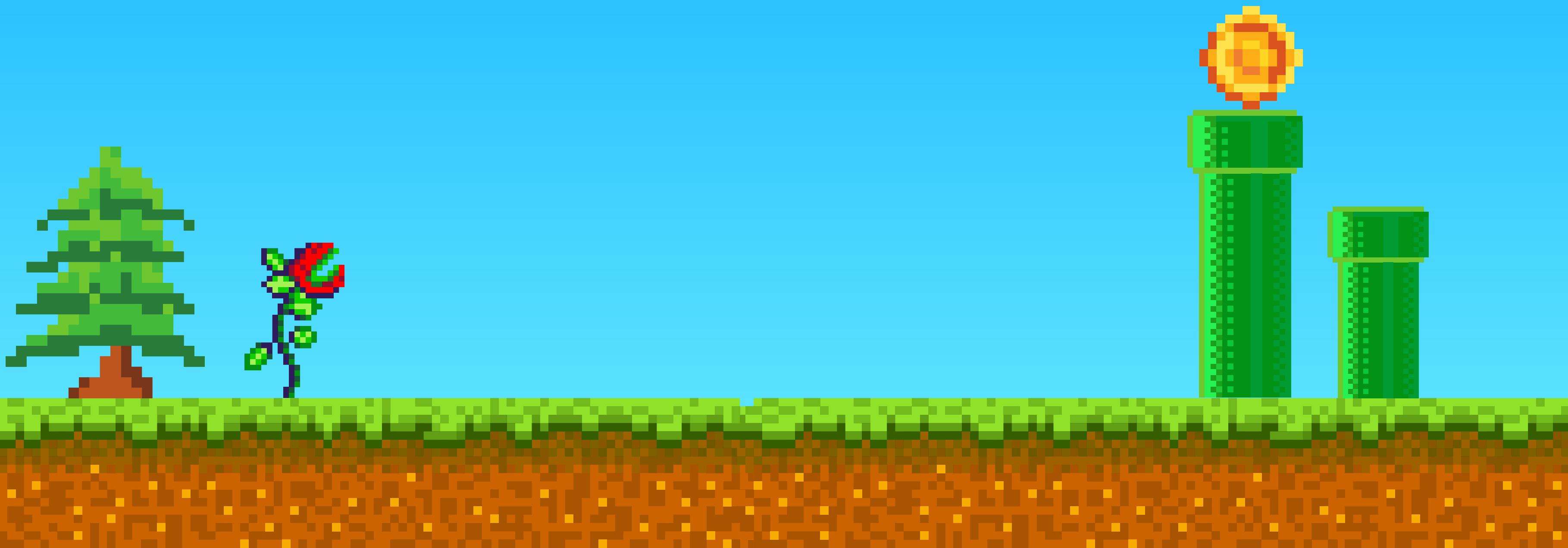


SUPER MARIO REINFORCEMENT LEARNING



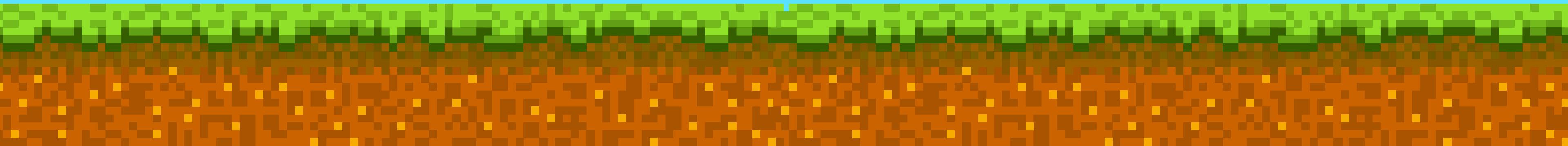
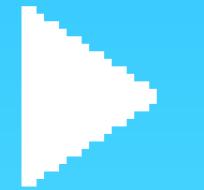
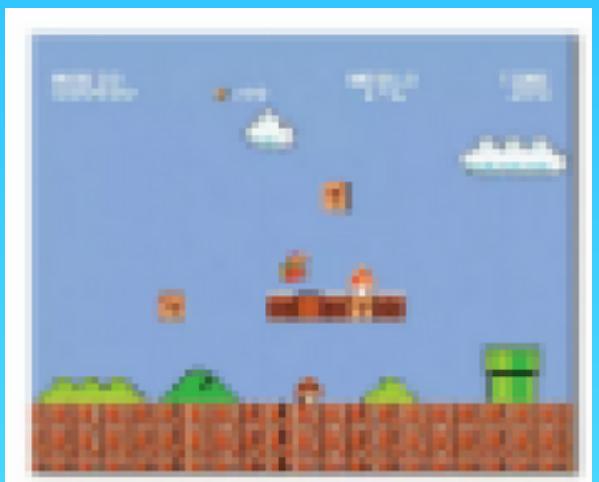
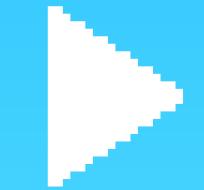
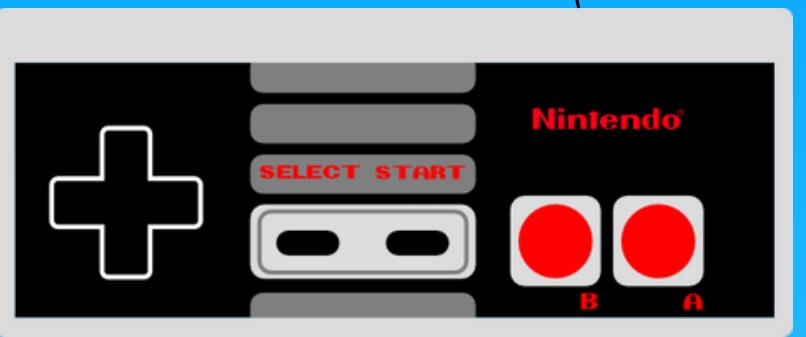
PRZYGOTOWANIE

ustalenie
dostępnych
ruchów

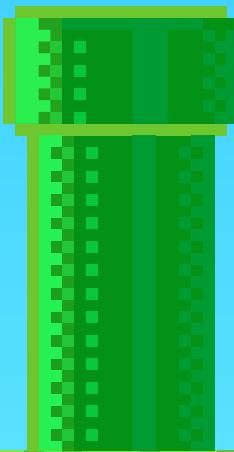
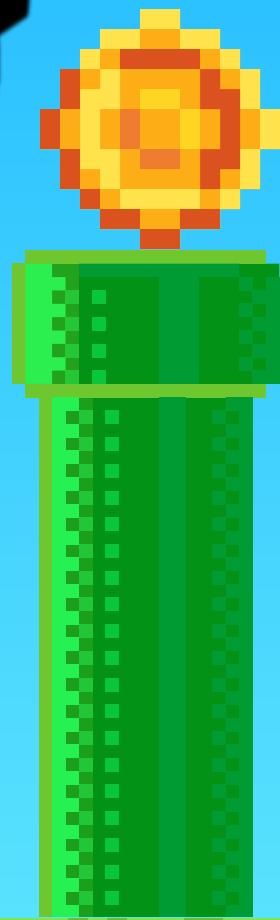
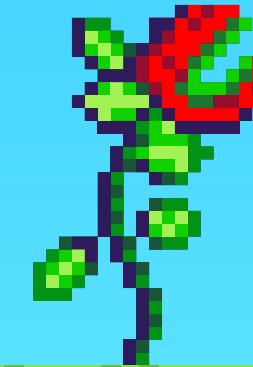
przeskalowanie
obrazu

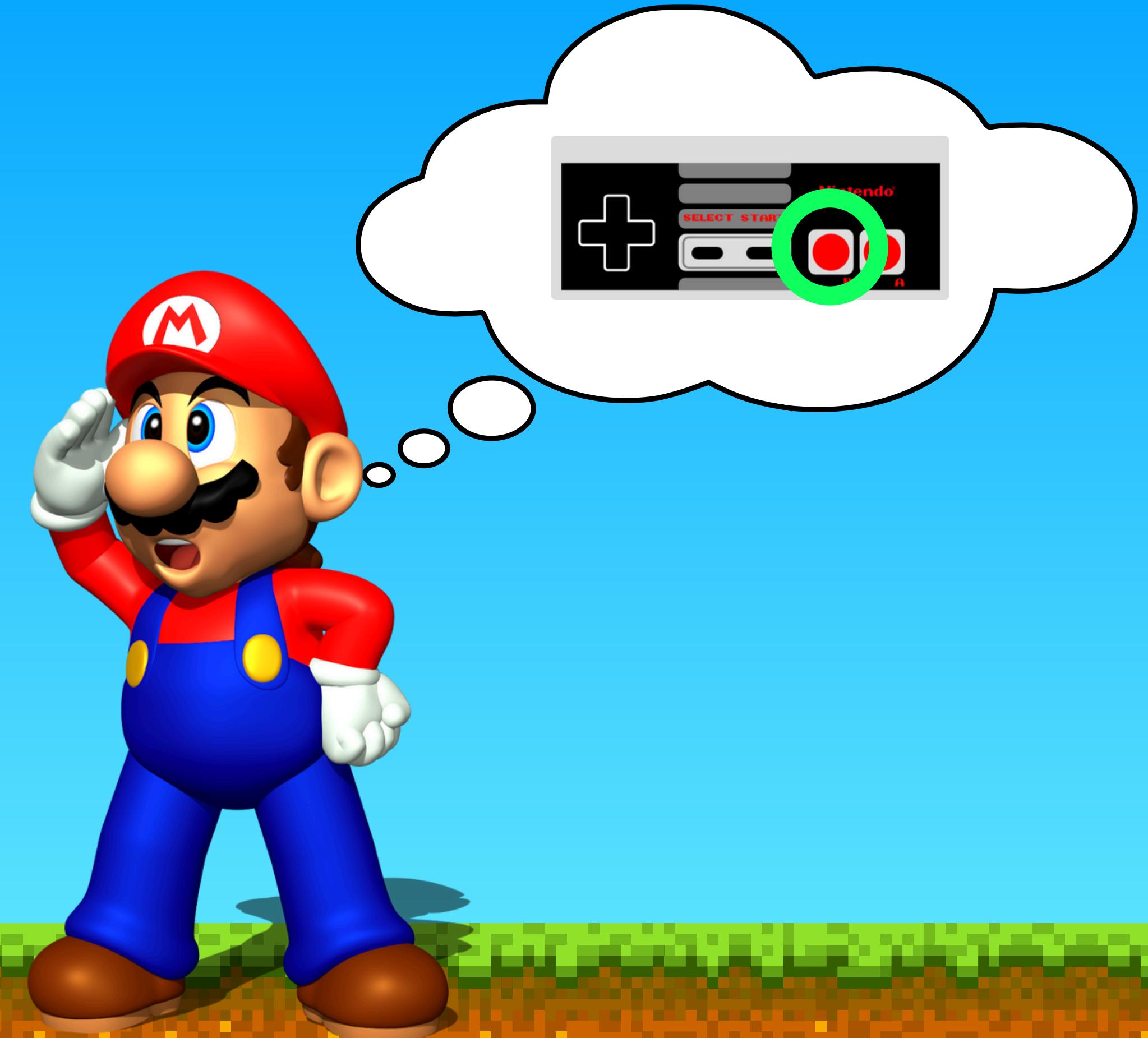
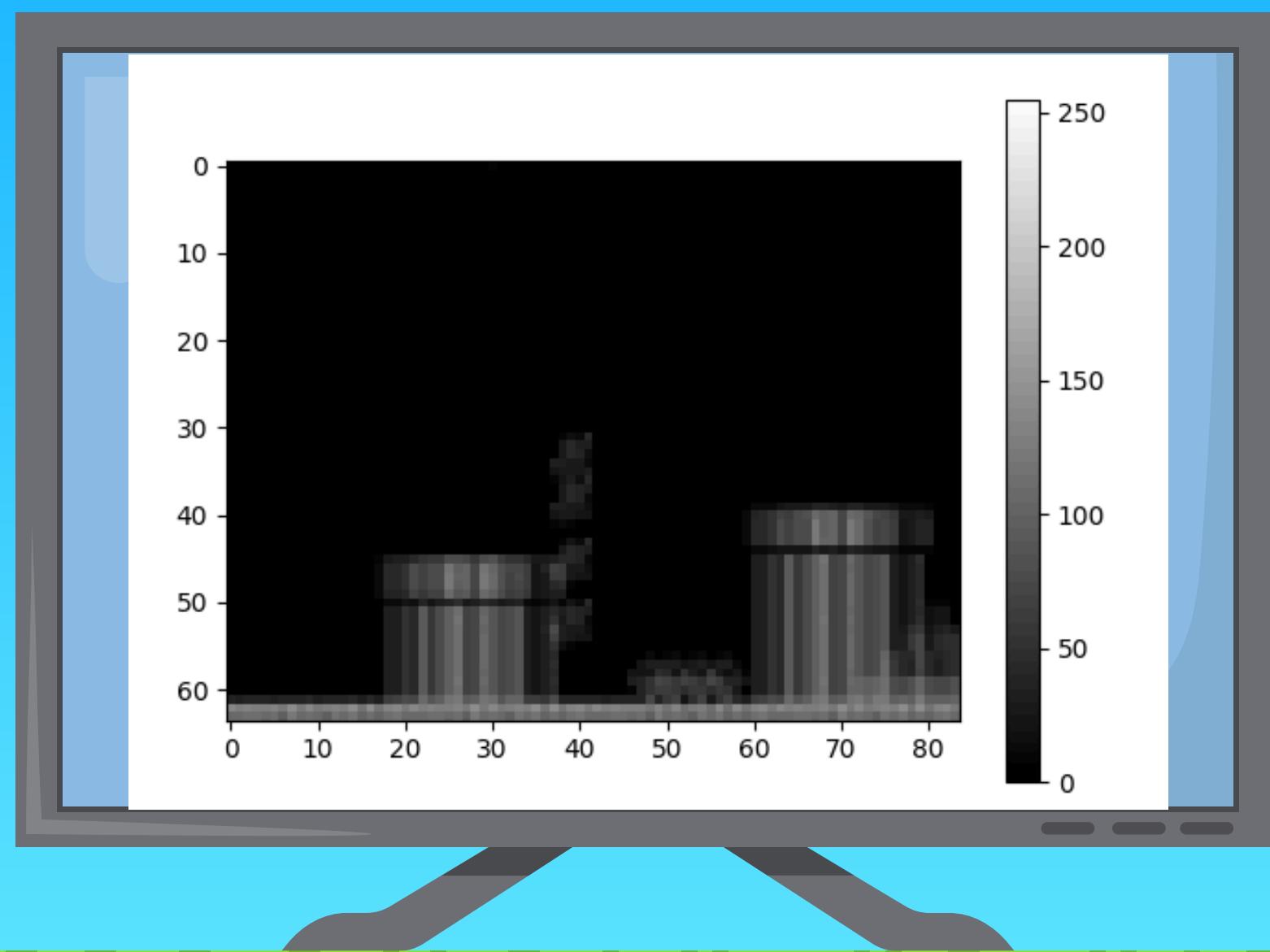
pozbycie się
kolorów z
obrazu





JAK TO DZIAŁA?





DOUBLE DEEP Q

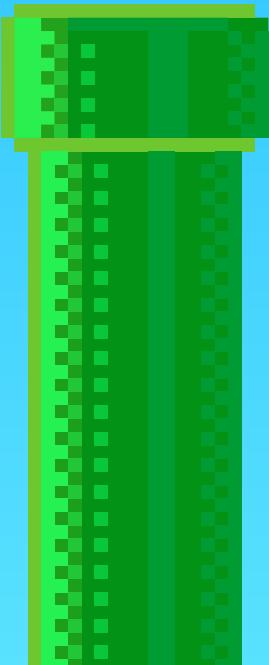
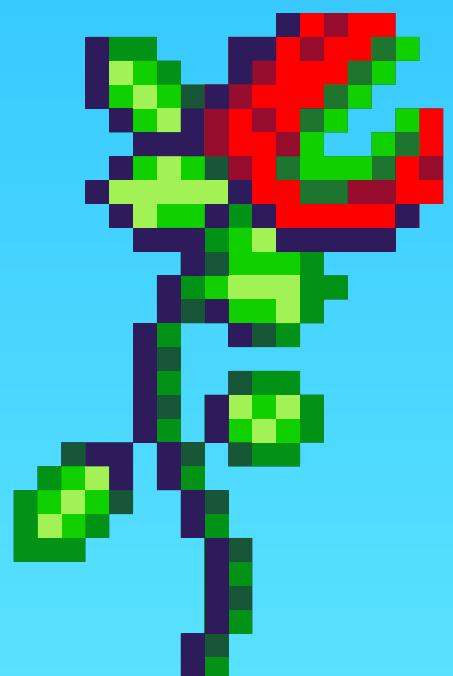
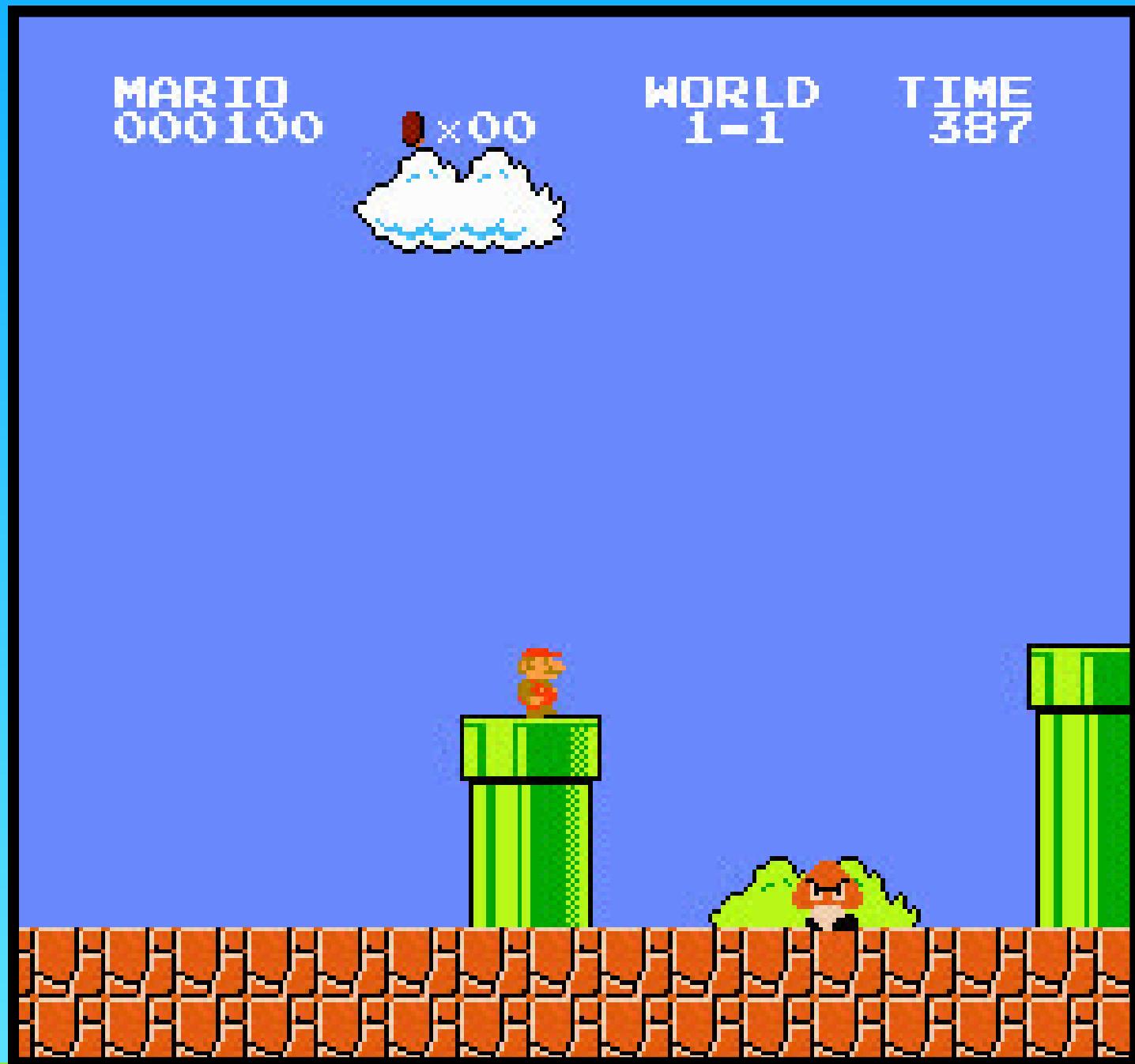
$$Q(S_t, A_t) \leftarrow Q(S_t, A_t) + \alpha [R_{t+1} + \gamma \max_a Q(S_{t+1}, a) - Q(S_t, A_t)]$$



EPSILON GREEGY

A large orange square icon featuring a black question mark, with a black plus sign icon to its left. The word "EPSILON" is in blue, "GREEGY" is in red, and the question mark icon is in orange.

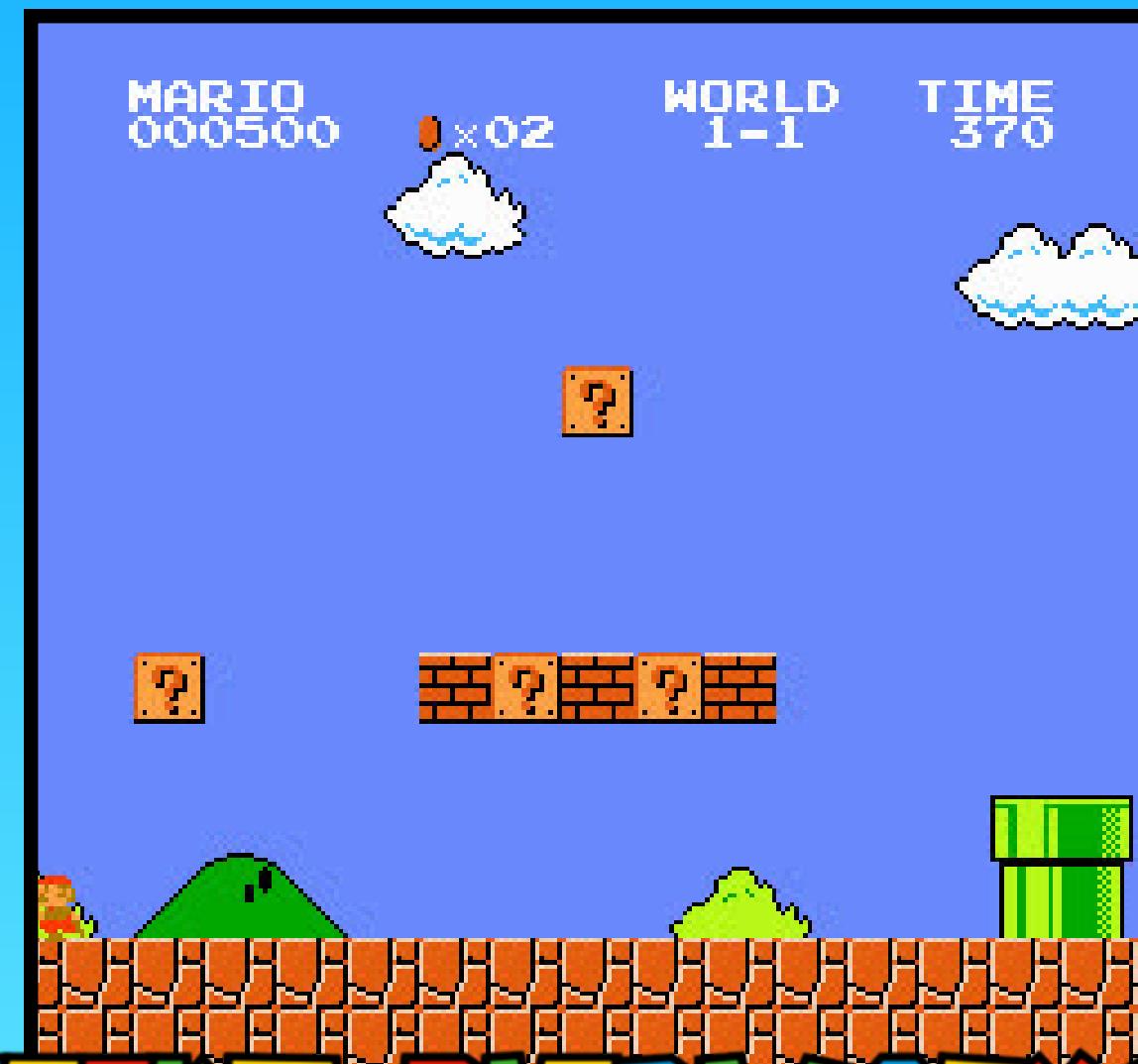
ŁOSOWE RUCHY



NAUCZONY != LEPSZY



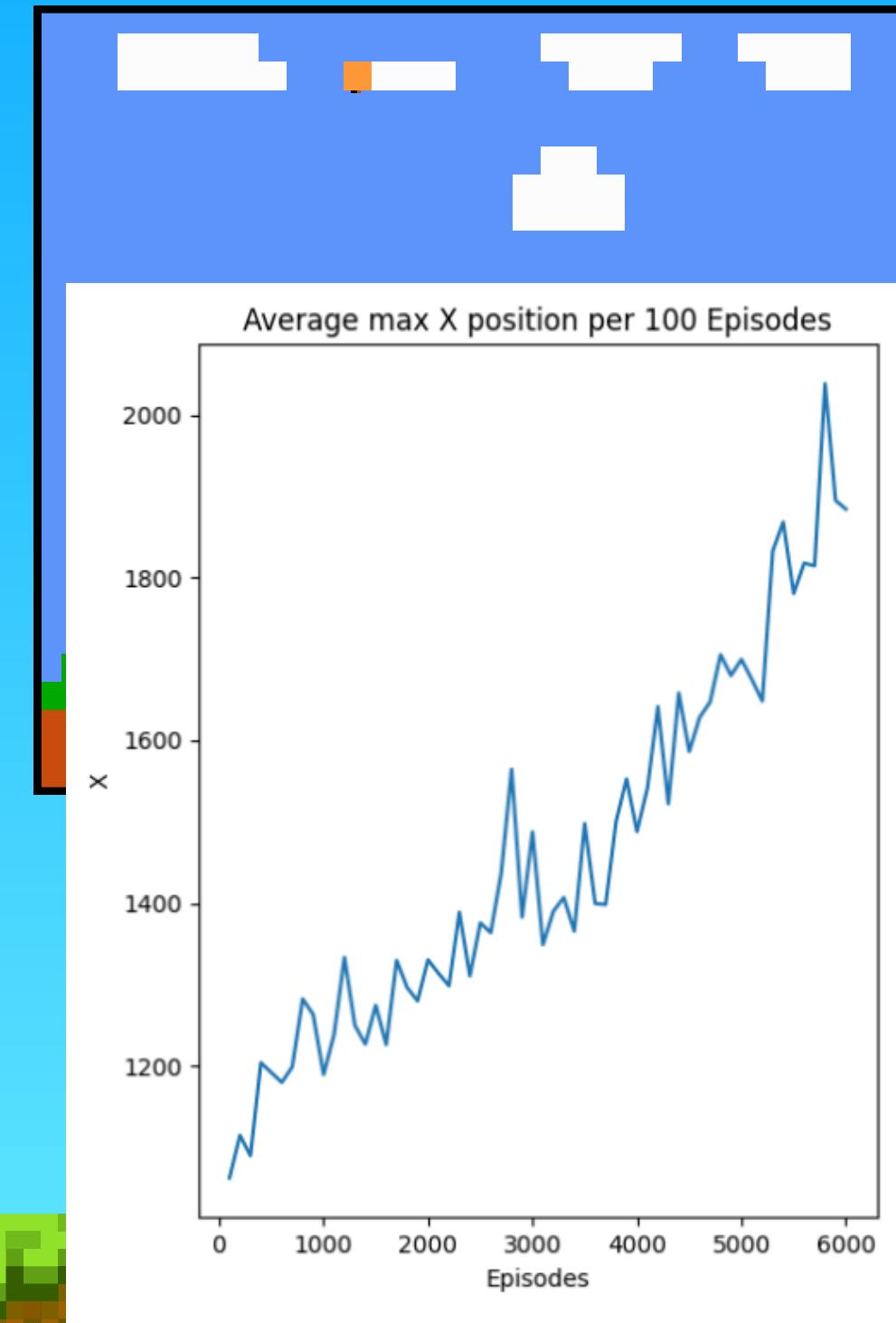
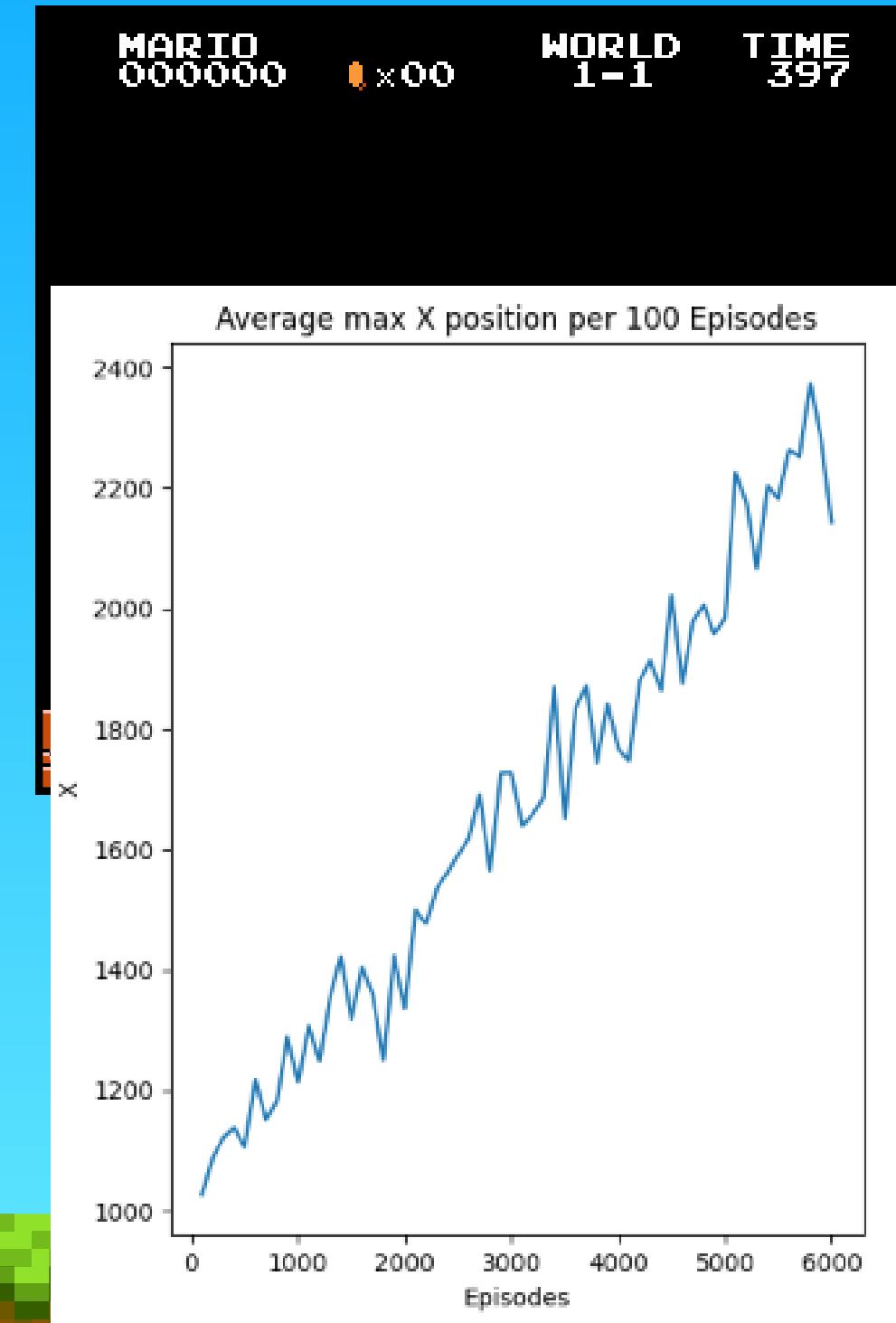
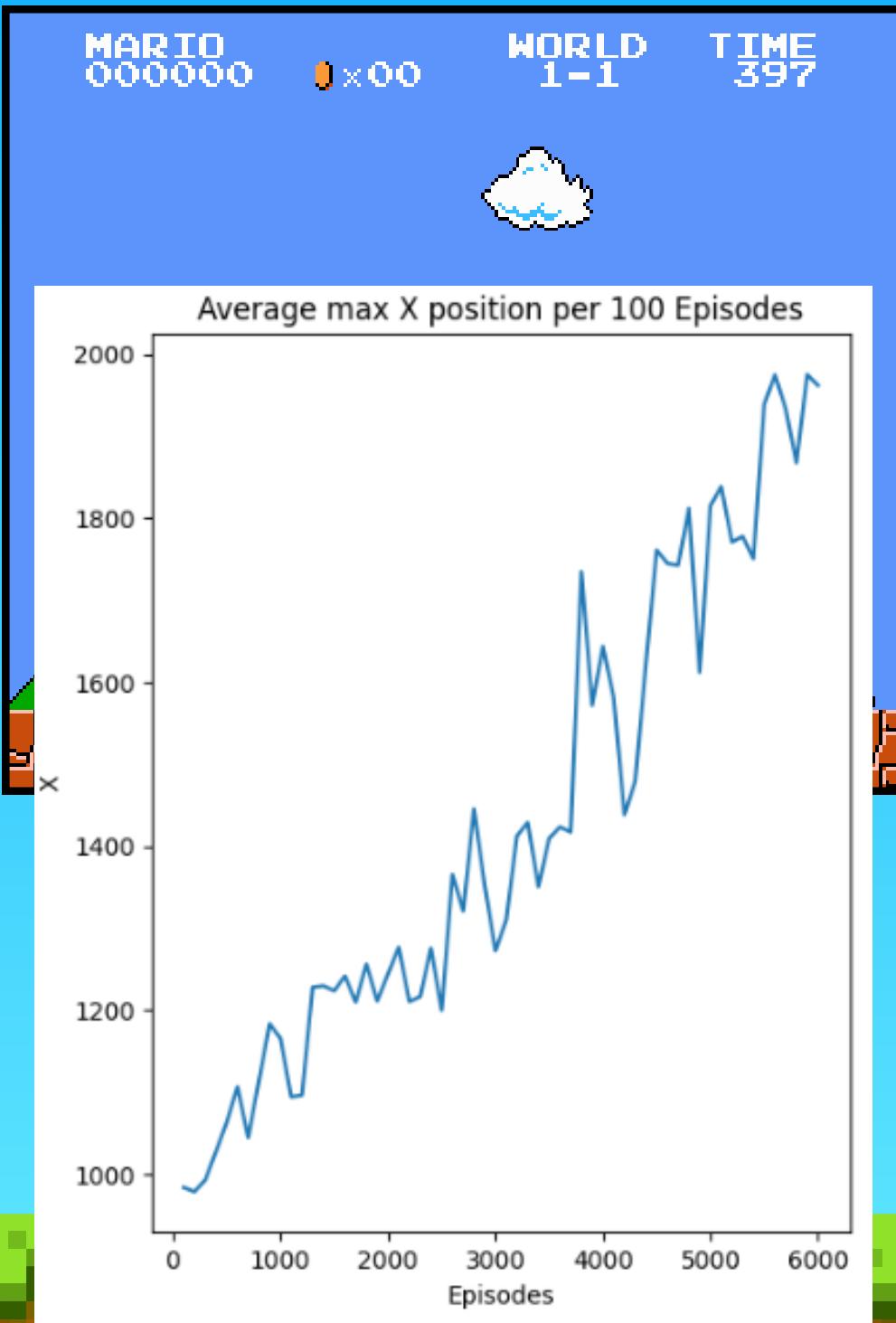
EFEKT PIERWSZEGO
UCZENIA



EFEKT PIERWSZYCH
ZMIAN NAGRODY



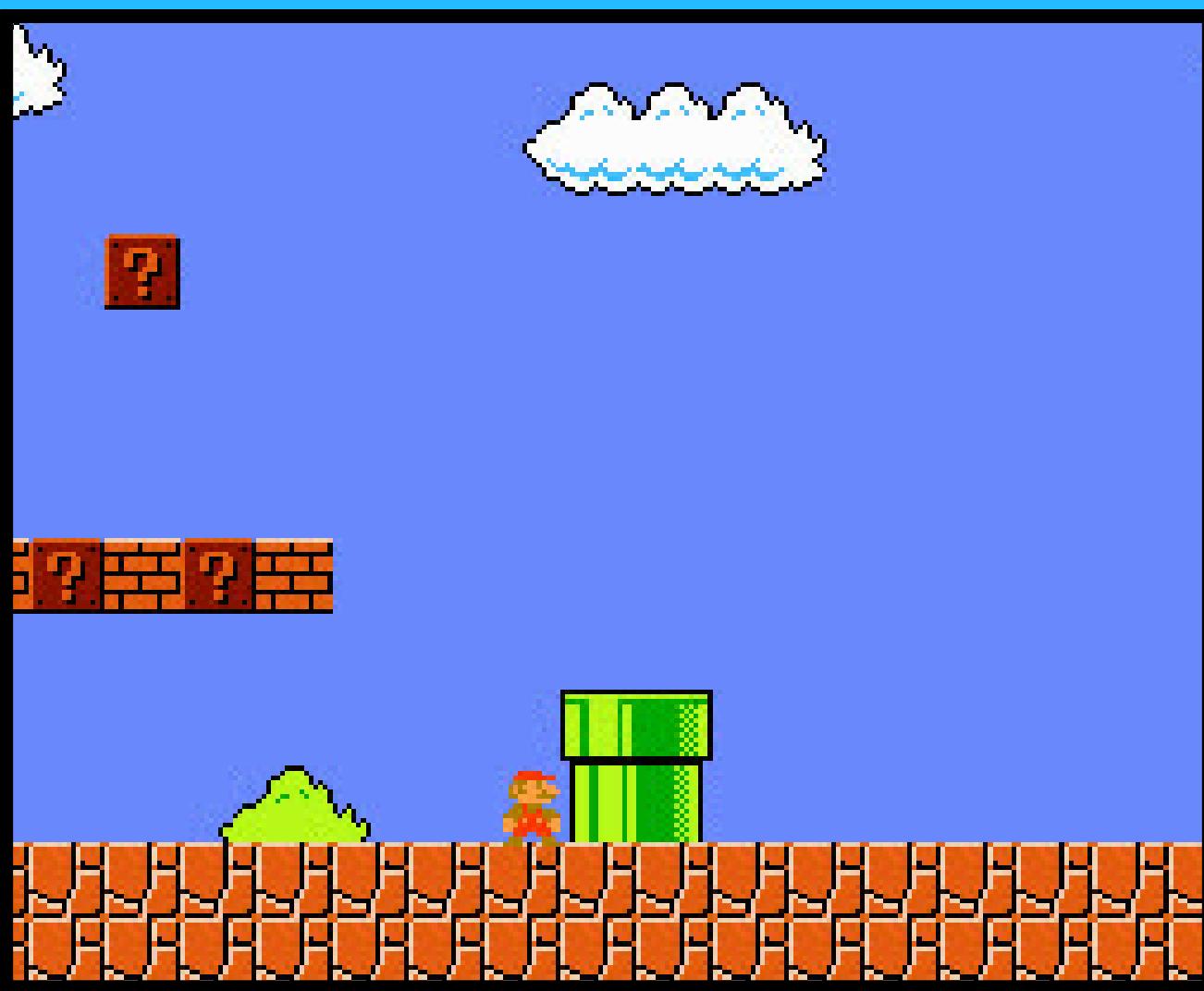
LICZY SIE KAZDY DETAL?



CZAS NIE JEST
PO NASZET JEST STRONIE



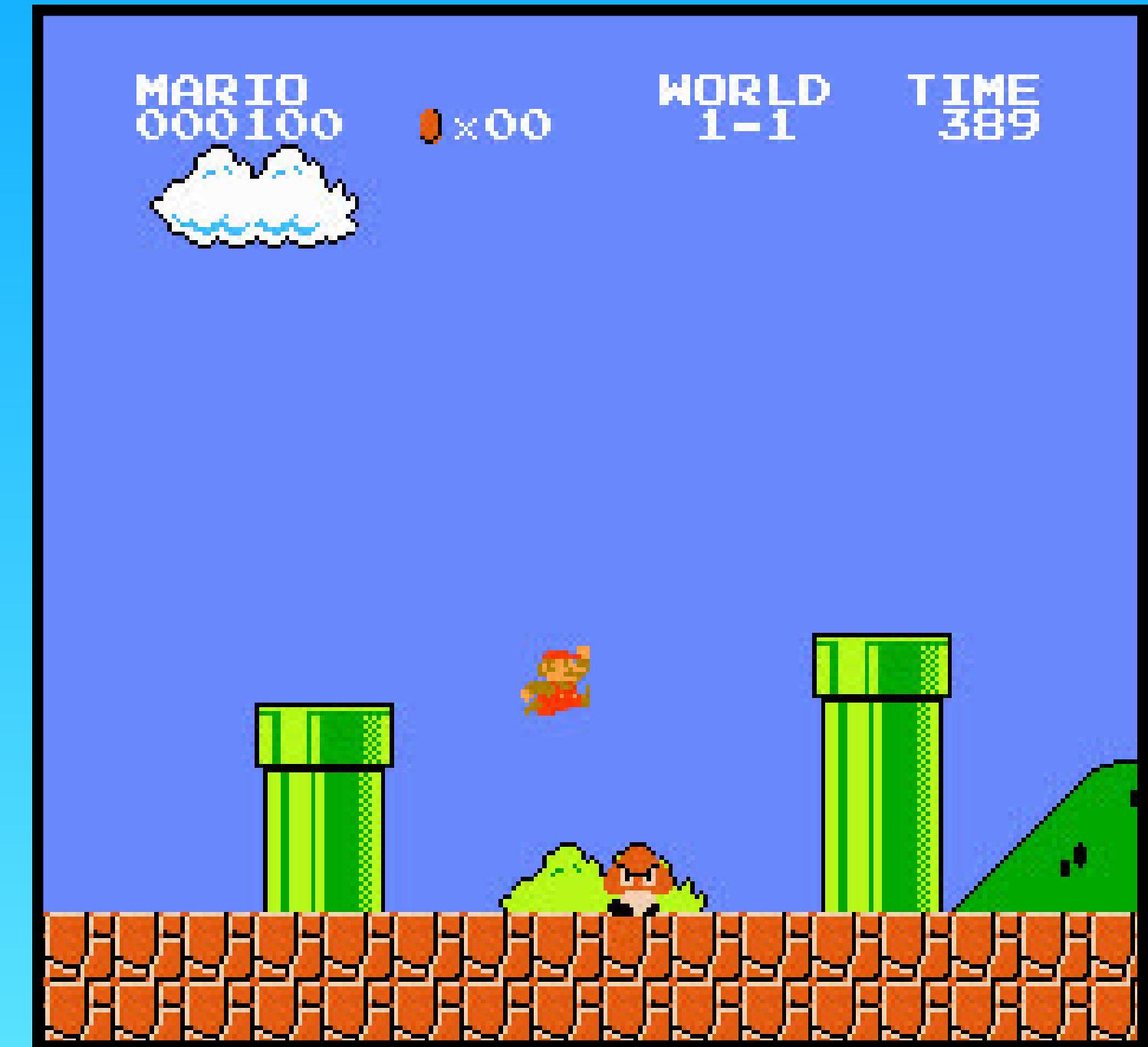
CZAS NIE JEST
PO NASZEJ STRONIE



PODLOGA TEZ NIE...



PIERWSZY OPONENT



Fix: DODANIE KARY ZA STANIE W MIEJSCU

JUZ PRAWIE KONIEC...



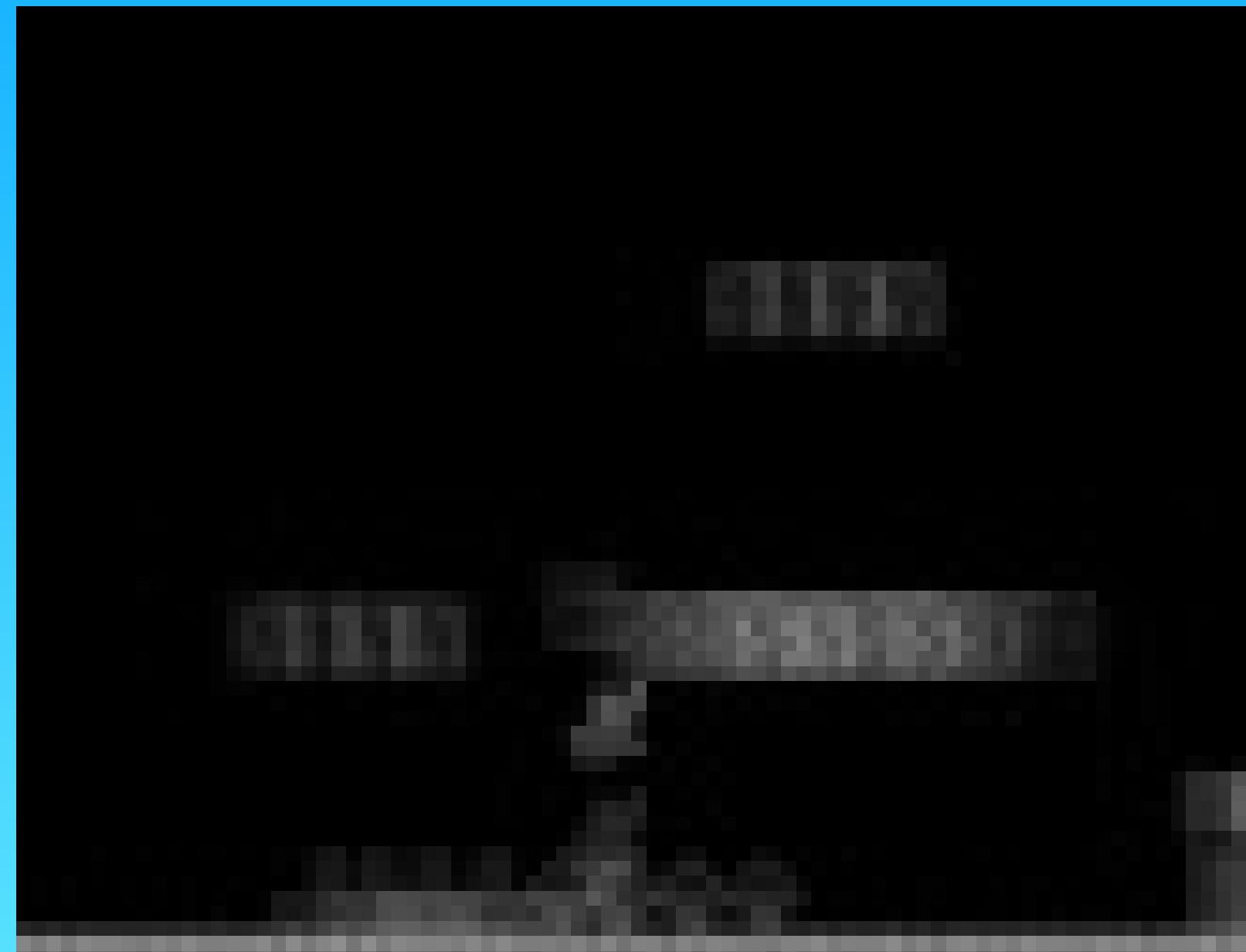
Fix: DODANIE +500 ZA UKONCZENIE POZIOMU

PIERWSZE SUKCESY!



**PROBLEM: DOPASOWANIE
EPSILON ON DECAY**

PIERWSZE DOBRE PRZEDSCIE



ROBOT POV



EMULATOR

NAJLEPSZY Z NAJLEPSZYM



CZAS: 339

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- Kauten, C. (2018). Super Mario Bros for OpenAI Gym. GitHub.
<https://github.com/Kautenja/gym-super-mario-bros>
- <https://sohum-padhye.medium.com/playing-super-mario-bros-with-reinforcement-learning-81ee0c235372>