READ ME

1. There's a paper that presents a **variant of Modern DQN**, and its full code (along with other relevant materials) is available on **Dropbox** (https://www.dropbox.com/home/rlpricing-master/rlpricing-master). I'll share both the paper and the Dropbox link with you.
2. This time I won't give you a Word file — instead, I'll share a **Deepseek conversation**, which ends with the **DQN class**. This was done because I had already uploaded the code and the paper earlier, along with all the **hyperparameters and related details**. Later, we were asked to fix some issues using our own code; after several iterations of corrections, this final version was obtained. You'll find all the important points throughout the conversation, but everything is literally included in the code itself (with comments and notes).
3. Finally, there's another conversation — it contains just **one message** describing the **potential issues**. Go through it carefully.
4. Here's what you mainly need to do:
    - Review **Deepseek's DQN class** and that **single-message (you.com grok 4) conversation**.
      https://chat.deepseek.com/share/7l7rkstfe6ghqxi9d8
    - Check whether Deepseek's implementation is **aligned** with the DQN class (I've already checked and made some changes since the two environments were different).
    - Lastly, check **you.com's Grok 4 reply**. If you think the choices suggested there are better, you can use them.
      exact copy chatgpt: https://chatgpt.com/share/690f8abb-06c4-8003-b74d-04d12fbe100b
        - *(Note: the state must be 2D, not 1D, like in our other algorithms.)*
        - *(You can adjust the hyperparameters if the ones in the paper and the code differ — it's up to you.)*
        - *Loss Function and Gradient Handling – MSE vs Huber loss (choose one)*
        - *(There are "ig" true/false flags in the code — modify them as needed.)*

rlpricing-master (dropbox)

1. Duopoly.py (their duopoly model)
2. ql.py (their dqn implementation)
3. gymql store.py