DQN and DDPS in Loma Milestone

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1   Data Preprocessing

I have downloaded the Arcade Learning Environment(ALE), which is an environment for game simulation. The frames are captured dynamically through playing. I reduced the input dimensionality to 84×84. The frames byte streams flowing into the loma pipeline. I use four frames as a stack to the loma. The evaluation code is also available now.

2   Loma Part

I implemented the matrix operation already. The differentiation code is generated. Since all normal functions are implemented in Loma, I do not need to consider about the non-linear function implementation.

3   Next Step

The next step will be convolution, which will be more difficult to implement. Then I need to stack the network and start training and inference.