- 25%) Low exploration - the strategy of going backward uphill and using the downward force to reach the top. stage shows improvement over 0%, which talks abc learning progress.
- 50%) it balances exploitation and exploration, agent starts exploitaing its previous discovery of gaining momentum, This leads to uncessary backward and forwarc movements. but still the agent reaches the goal.
- 75%) it learns to increase the momentum efficiently to reach the goal quickly, its also minizes the number of swings
- 100%) At the highest level of exploitation (0% exploration), the DQN agent reaches optimality. It executes momentum swings (around 2) required to reach the go

Acrobot

- 0%) It attempts to gain momentum by moving the entire arm, but fails to reach goal. 100% exploration rate
- 25%) due to continued exploration, the agent reaches the goal very rarely. There's a spike in the length of episodes, indicating difficulty in achieving the goal.
- 50%) It takes more time to gain momentum. The agent attempts to swing more frequently and fails to reach the goal.
- 75%) There's improvement over previous stages. Agent starts utilizing momentum more effectively. It consistently reaches the goal with increased speed.
- 100%) The agent's time to reach the goal decreases compared to the 75% stage, looks like agent has likely reached optimality.

LunarLander

- 0%) agent explores randomly (100% exploration) and does not fire any engines. It tries to use free fall to its advantage, but due to the random policy, it crashes.
- 25%) The policy of firing all engines does not lead to reaching the goal effectively.resulting in either floating in mid-air or landing in the wrong place.
- 50%) The agent optimizes engine firing behavior. Uisng the reverse thrust, starts exploiting free fall to its advantage.
- 75%) agent refines its strategy by using thrusters alternatively to reduce penalties further. This leads in reaching the goal state 99% of the time
- 100%) the agent behaves similarly to the 75% stage but reaches the goal consistently