List of Experiments Performed -

Architecture	Env	Buffer Size	N	Refresh Buffer	State History	Sync Target Network Steps	Epsilon Decay	LR Decay	Other Settings	Success
DQN	CartPole	1000	1	Incompat	{1,2,4}	{5,25}	{T,F}	{T,F}	train_step_freq = 64	Yes
DQN	CartPole	1000	3	Incompat	{1,2,4}	{5,25}	{T,F}	{T,F}	train_step_freq = 64	Yes
DQN	CartPole	10000	1	Incompat	{1,2,4}	{5,25}	{T,F}	{T,F}	train_step_freq = 64	Yes
DQN	CartPole	10000	3	Incompat	{1,2,4}	{5,25}	{T,F}	{T,F}	train_step_freq = 64	Yes
ICM+A2C	{CartPole,Atari}	1000	1	True	{1,2,3,4}	{5,25,125,1k}	{T,F}	{T,F}	- train_step_freq = 64 - Varying loss hyperparams to control values of actor/critic/entropy/forward/inverse losses - Varying update frequency param update for icm and a2c module - Turning on/ off sticky_actions {1,4 steps} - Skip frames {1,4 frames} - gradient clipping {on/off} - policy_train_delay by 2k episodes {on/off}	No
ICM+A2C	{CartPole,Atari}	10000	1	True	{1,2,3,4}	{5,25,125,1k}	{T,F}	{T,F}		No
ICM+A2C	{CartPole,Atari}	100000	1	True	{1,2,3,4}	{5,25,125,1k}	{T,F}	{T,F}		No
ICM+A2C	{CartPole,Atari}	1000	3	True	{1,2,3,4}	{5,25,125,1k}	{T,F}	{T,F}		No
ICM+A2C	{CartPole,Atari}	10000	3	True	{1,2,3,4}	{5,25,125,1k}	{T,F}	{T,F}		No
ICM+A2C	{CartPole,Atari}	100000	3	True	{1,2,3,4}	{5,25,125,1k}	{T,F}	{T,F}		No

* Note settings are described in settings.py file
* {a,b,c} means that the entire set of values were tried.

- DQN Returns