## CS 294-112 HW1 Yujia Luo 25296369

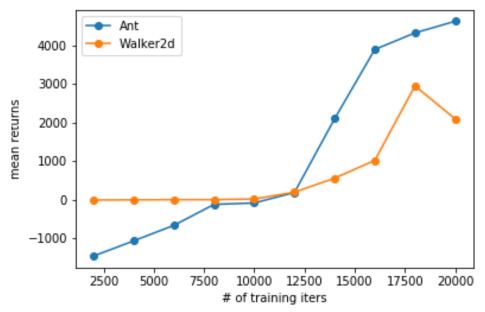
I used the same deep model for behavior cloning and DAgger: a simple neural net with two 64-unit fully connected hidden layers trained with batch size = 2048 and an Adam optimizer.

## **Behavior Cloning**

2.2

	Mean Return	Std Return	#Rollouts
Ant (Expert)	4732.42	503.27	100
Ant (BC)	4624.35	424.38	50
Walker2d (Expert)	5526.56	75.39	100
Walker2d (BC)	2095.27	2322.00	50

2.3 The following plot shows how the two agents' mean return changes as *the number of training iterations* increases (bc agent is evaluated every 2000 training iterations):



I chose the number of training iterations to how differently 4-leg-agent and 2-leg agent learn and how fast they converge given the same expert data

## **DAgger**

3.2

The following plot shows how Walker2d-v2 agent's performance changes as the number of training iterations increases using three different policies: expert, behavior cloning, and DAgger (#rollout = 40, and agents are evaluated every 3000 training iterations):

