Exercise 2

1- update the value of the weight

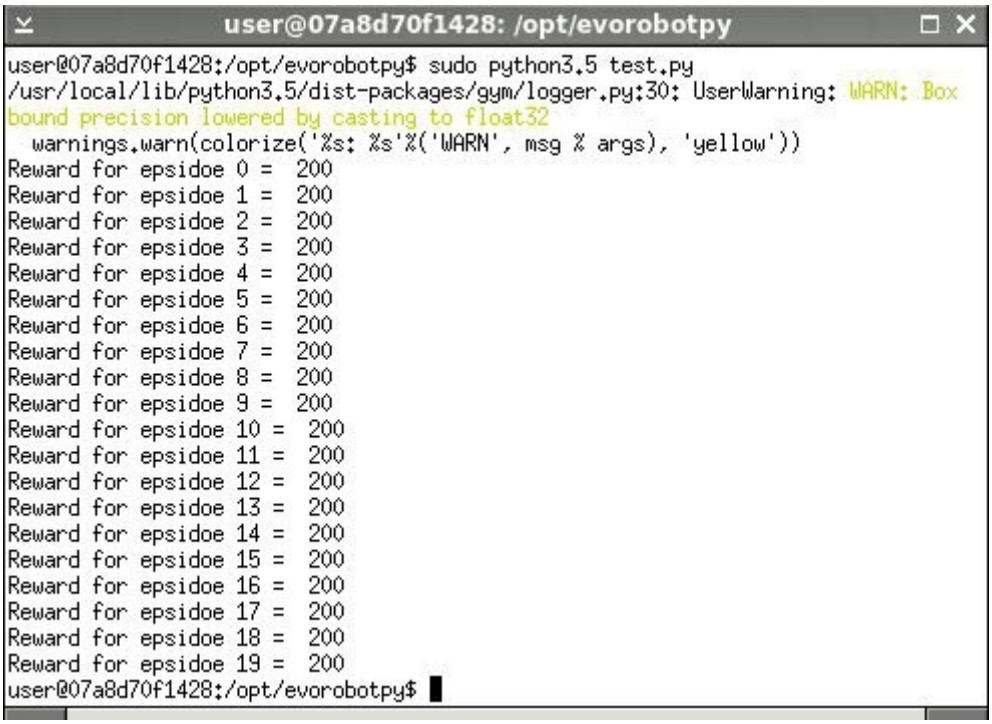
in this exercise , first I have initialize the weight randomly for 20 episode ,there are 37 parameter in one episode , 25 parameter for hidden layer and 12 parameter for output layer, for 20 episode I have randomly initialize the (20,37) matrics,and I have printed the value of the reward in assending order for next time I have replace the 10 best reward parameter with other 10 episode parameter ,which have small value for the reward ,

2-Training of the neural network

after updating parameter, I have train the neural network with 20 episode in 30 generation with 20 trial and after every 20 episode parameter are updated. When reward value for 20 episode become 200 , I have save the parameter,

3-Test of the neural network

I have used the updated parameter to see the stability of the Cartpol v_0 , its giving stable result , file is save with ***test_cartpole.py***



4-Conclusion

neural network is giving stable result and converge in my case , but its depend upon the initial value ,sometime it doesn't converge due to its initial vale ,