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Reinforcement Learning

Python

# Full code

Git [link](https://github.com/PacktPublishing/Hands-On-Reinforcement-Learning-with-Python.git)

# Installation

* **conda install opencv**
* **pip install gym==0.7.0**
* pip install pyglet==v1.3.2
* conda install swig
* pip install box2d-py

# sample code

import gym  
env = gym.make('CartPole-v0')  
env.reset()  
for \_ in range(1000):  
 env.render()  
 env.step(env.action\_space.sample())

## checking environements

from gym import envs  
print(envs.registry.all())

## car learning

import gym  
env = gym.make('CarRacing-v0')  
env.reset()  
for \_ in range(1000):  
 env.render()  
 env.step(env.action\_space.sample())

## learn to walk

import gym  
env = gym.make('BipedalWalker-v2')  
for i\_episode in range(100):  
 observation = env.reset()  
 for t in range(10000):  
 env.render()  
 print(observation)  
 action = env.action\_space.sample()  
 observation, reward, done, info = env.step(action)  
 if done:  
 print("{} timesteps taken for the episode".format(t+1))  
 break