

from gym\_duckietown.tasks.task\_solution import TaskSolution  
import numpy as np  
import cv2  
  
class LfChallengeNoCvTaskSolution(TaskSolution):  
 def \_\_init\_\_(self, generated\_task):  
 super().\_\_init\_\_(generated\_task)  
  
  
 def solve(self):  
 env = self.generated\_task['env']  
 kv = 0.5  
 kw = 0.3  
 speed = 0  
 steering = 0  
 print('kv=', kv, 'kw=', kw)  
 print('speed=', speed, 'steering=', steering)  
  
 while True:  
 lane\_pose = env.get\_lane\_pos2(env.cur\_pos, env.cur\_angle)  
 print('env.cur\_pos=', env.cur\_pos, 'env.cur\_angle=', env.cur\_angle)  
 distance\_to\_road\_center = lane\_pose.dist  
 print('distance\_to\_road\_center=', distance\_to\_road\_center)  
 angle\_from\_straight\_in\_rads = lane\_pose.angle\_rad  
 print('angle\_from\_straight\_in\_rads=', angle\_from\_straight\_in\_rads)  
 # Требуется по положению робота в полосе определить линейную и угловые скорости  
 # speed = 1 - kv \* distance\_to\_road\_center  
 # steering = 0 + kw \* angle\_from\_straight\_in\_rads  
 print('speed=', speed, 'steering=', steering)  
 print('distance\_to\_road\_center=', distance\_to\_road\_center, 'angle\_from\_straight\_in\_rads=', angle\_from\_straight\_in\_rads)  
 env.step([speed, steering])  
 env.render()







