# Basic Driving Agent

The basic driving agent picks a random action from all legal actions available. It does not seem to reach the goal. The file BasicAgent.txt has result of running the basic agent.

# Choice of States

I choose my state as a tuple with information about light and next_waypoint. With this state I can identify each unique state without having to store unnecessary information like oncoming, left, right and deadline that would take up space without making a state unique.

## Q-Learning

Using Q-learning the smartcab seems to make better decision than basic driving agent. It is able to reach the goal.

## Improving Q-Learning

File Alpha0_8Gamma0_2Epsilon0_1.txt contains results of running agent using q-learning with alpha 0.8, gamma 0.2 and epsilon 0.1. File Alpha0_9Gamma0_3Epsilon0_1.txt contains results of running agent using q-learning with alpha 0.9, gamma 0.3 and epsilon 0.1. It seems the agent learns faster with alpha 0.9 and gamma 0.3.