# state.py

Import traci

Def get\_state(traffic\_light\_id=”0”):

“””

Returns the current state vector:

[cars\_north, cars\_south, cars\_east, cars\_west, current\_green]

“””

Lanes = traci.trafficlight.getControlledLanes(traffic\_light\_id)

Current\_phase = traci.trafficlight.getPhase(traffic\_light\_id)

# Count vehicles in each lane

Cars\_per\_lane = [traci.lane.getLastStepVehicleNumber(lane) for lane in lanes]

# For 4-way intersection, assume order = [north, south, east, west]

State = cars\_per\_lane[:4] + [current\_phase]

Return state