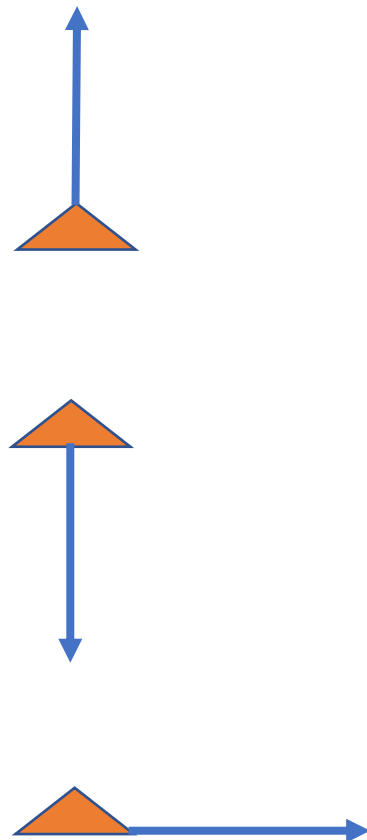


## HW3 V2 FAQ

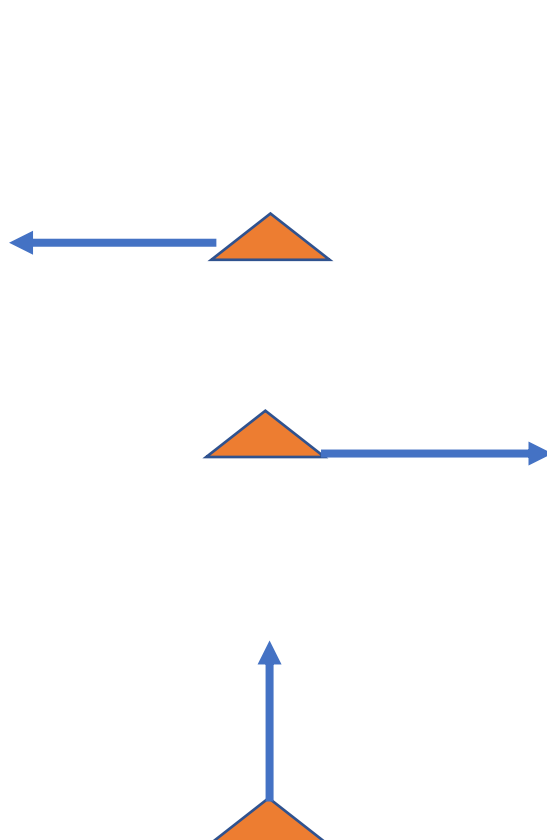
Please see answers to FAQ below. Anything in quotes comes from the HW3 V2 description.

- What happens if our car tries to go off grid?
  - In this case, your car will remain in whatever cell it was in when it tried to go off grid. You will then receive whatever penalty is associated with that cell.
- In the starting position, do we have a value of 0 or -1?
  - 0, you only receive a value when you make a move
- Do we stop if we hit an obstacle? Or do we continue trying to reach the goal?
  - No, you continue trying to reach the goal
- Using seeds 0-9 works, but 1-10 does not. Which seeds should we use?
  - 0-9
- What do turn\_left() and turn\_right() mean?
  - turn\_left(): Take the move rotated 90 degrees counterclockwise from your chosen move.
  - turn\_right(): Take the move rotated 90 degrees ~~counterclockwise~~ from your chosen move.
  - Here are some visual examples:

Original



Turn Left



- Do the probabilities of making a wrong move change if we are next to a wall or in a corner?
  - No, if your car tries to go off grid it will behave as described earlier in this FAQ.
- The values of the corrected outputs on DEN are different from the outputs on Vocareum
  - This has been corrected
- What do the values in Hint #3 mean?
  - This is for you to think about and implement. Think about the algorithms we've studied thus far, and ask yourself if this information would be helpful to any of them.
- What indentation level should "k+=1" be at in the sample code for simulation.
  - It should just be inside the while loop. Here is a clearer version:

```

for i in range(len(cars)):
    for j in range(10):
        pos = cars[i]
        np.random.seed(j+1)
        swerve = np.random.random_sample(1000000)
        k=0
        while pos != ends[j]:
            move = policies[i][pos]
            if swerve[k] > 0.7:
                if swerve[k] > 0.8:
                    if swerve[k] > 0.9:
                        move = turn_left(turn_left(move))
                    else:
                        move = turn_left(move)
                else:
                    move = turn_right(move)
            k+=1

```