Invariant

The function is can_enter that uses the condition ok_to_go. It becomes true when the direction of the car that wants to enter is for example SOUTH, and the counter of numbers of cars going NORTH is 0. Then the car can enter. The two counters (inside_north and inside_south) get one more value after this condition is checked. So the can_enter function does not change any values, and checks variables that only are allowed to change when a car has entered.