

Initialize game:

```
DECLARE car_speed AS FLOAT = START_SPEED
DECLARE max_speed AS FLOAT = 6 * START_SPEED
DECLARE lives AS INTEGER = 3
DECLARE score AS INTEGER = 0
DECLARE car_position AS (X, Y) = (START_X, START_Y)
DECLARE other_cars AS LIST = []
DECLARE slow_down_timer AS FLOAT = 0
DECLARE game_timer AS FLOAT = PREDEFINED_TIME
```

Begin:

WHILE game is not over:

```
IF key 'W' pressed:
    IF car_speed < max_speed:
        car_speed = car_speed + ACCELERATION
ELSE IF
```

```
IF key 'S' pressed:
    IF car_speed > 0:
        car_speed = car_speed - DECELERATION
    ELSE IF
ELSE IF
```

```
IF key 'X' pressed:
    car_speed = 0
ELSE IF
```

```
IF key 'A' pressed:
    move car to left lane
ELSE IF
```

```
IF key 'D' pressed:
    move car to right lane
ELSE IF
```

UPDATE car_position based on car_speed

FOR each car in other_cars:

```

    UPDATE car's position based on its speed
    IF car is off-screen:
        REMOVE car from other_cars
    ELSE IF

    IF collision between car and user's car:
        lives = lives - 1
        slow_down_timer = 3
        IF lives == 0:
            game is over
            DISPLAY lose screen
        ELSE IF
    ELSE:
        IF car is passed without collision:
            score = score + 5
        ELSE IF
    ELSE IF
ENDFOR

IF slow_down_timer > 0:
    car_speed = car_speed / 2
    slow_down_timer = slow_down_timer - 1
ELSE IF

game_timer = game_timer - 1
IF game_timer <= 0:
    game is over
    DISPLAY win screen
ELSE IF

    RENDER highway_background, car_sprite,
other_car_sprites on screen
    DISPLAY score and lives on screen

ENDWHILE

IF game is over:
    DISPLAY game results: score, win or lose message
    OPTION to restart game or quit

```