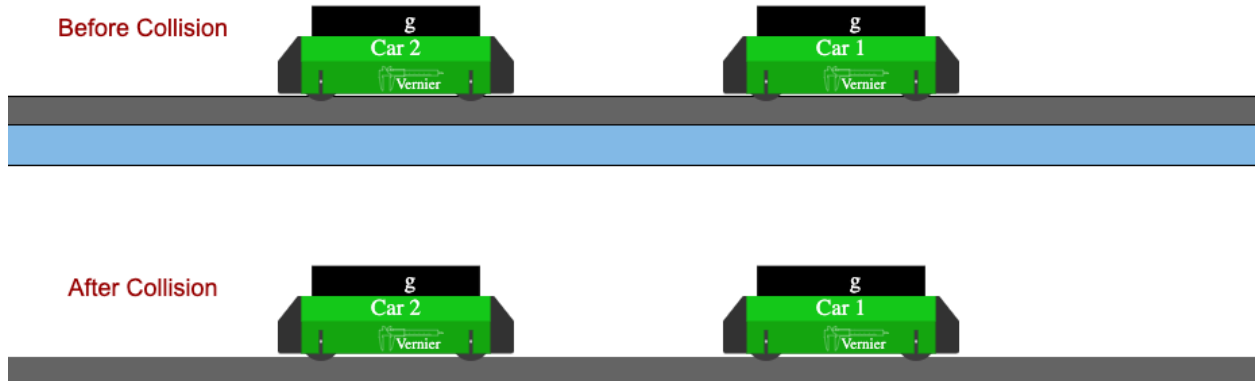


# Momentum Conservation 6

Step 1: Give the mass on top of each car and the velocity of each car both before and after the collision in the space below.



Step 2: Find the total momentum of the system before the collision. Show your work neatly below.

Step 3: Use the idea of momentum conservation to find the velocity of Car 2 after the collision. It is possible that you will get a negative velocity. This just means that the car is moving to the left after the collision. Show all your steps in the space below. Enter your answers into the program to see if you did all your work correctly.

Step 4 (Optional): Is this a perfect or nearly perfect elastic collision? Show your work and explain your answer