var car,car1,car2,car3,wall,wall1,wall2,wall3;

var speed,weight;

var line,line1,line2,line3;

function setup() {

  createCanvas(1600,800);

  speed = random(45,90)

  weight= random(400,1500)

  car = createSprite(50,80,80,20);

  car.shapeColor =color("white");

  car.velocityX=speed;

  wall =createSprite(1500,80,50,100);

  wall.shapeColor=color(80,80,80);

  var line =createSprite(1000,150,2000,20);

  car1 = createSprite(1450,225,50,20);

  car1.shapeColor =color("yellow");

  wall1 =createSprite(1500,225,50,100);

  wall1.shapeColor=color(80,80,80);

  line1 =createSprite(1000,300,2000,20);

  car2 = createSprite(1450,370,50,20);

  car2.shapeColor =color("red");

  wall2 =createSprite(1500,370,50,100);

  wall2.shapeColor=color(80,80,80);

  line2 =createSprite(1000,450,2000,20);

  car3 = createSprite(1450,515,50,20);

  car3.shapeColor =color("green");

  wall3 =createSprite(1500,515,50,100);

  wall3.shapeColor=color(80,80,80);

  line3 =createSprite(1000,600,2000,20);

}

function draw() {

  background(0,0,0);

if(wall.x-car.x<(car.width+wall.width)/2)

{

car.velocityX=0;

var deformation =(0.5\*weight\*speed\*speed)/22500;

if(deformation>180){

  car.shapeColor=color("red");

}

if(deformation<180&&deformation>100){

  car.shapeColor=color("yellow");

}

if(deformation<100){

  car.shapeColor=color("green");

}

car.velocityX=0;

}

  drawSprites();

}