

Lecture 2: Variables and conditionals

1. Modify the bouncing ball sketch so that the initial velocity is random.
2. Modify the bouncing ball sketch so that there are two balls bouncing around the space. (Assume that they can pass through each other!)
3. Modify the bouncing ball sketch so that the ball's motion is affected by a gravitational force pulling it downwards. (HINT: $\text{speed} = \text{speed} + \text{acceleration}$).
4. Modify the bouncing ball sketch so that you can drag the ball in a particular direction and then let it go so that it continues in the direction in which you have dragged at.
5. Modify the two-ball bouncing ball sketch that you made in question 2 so that the balls bounce off each other when they collide.