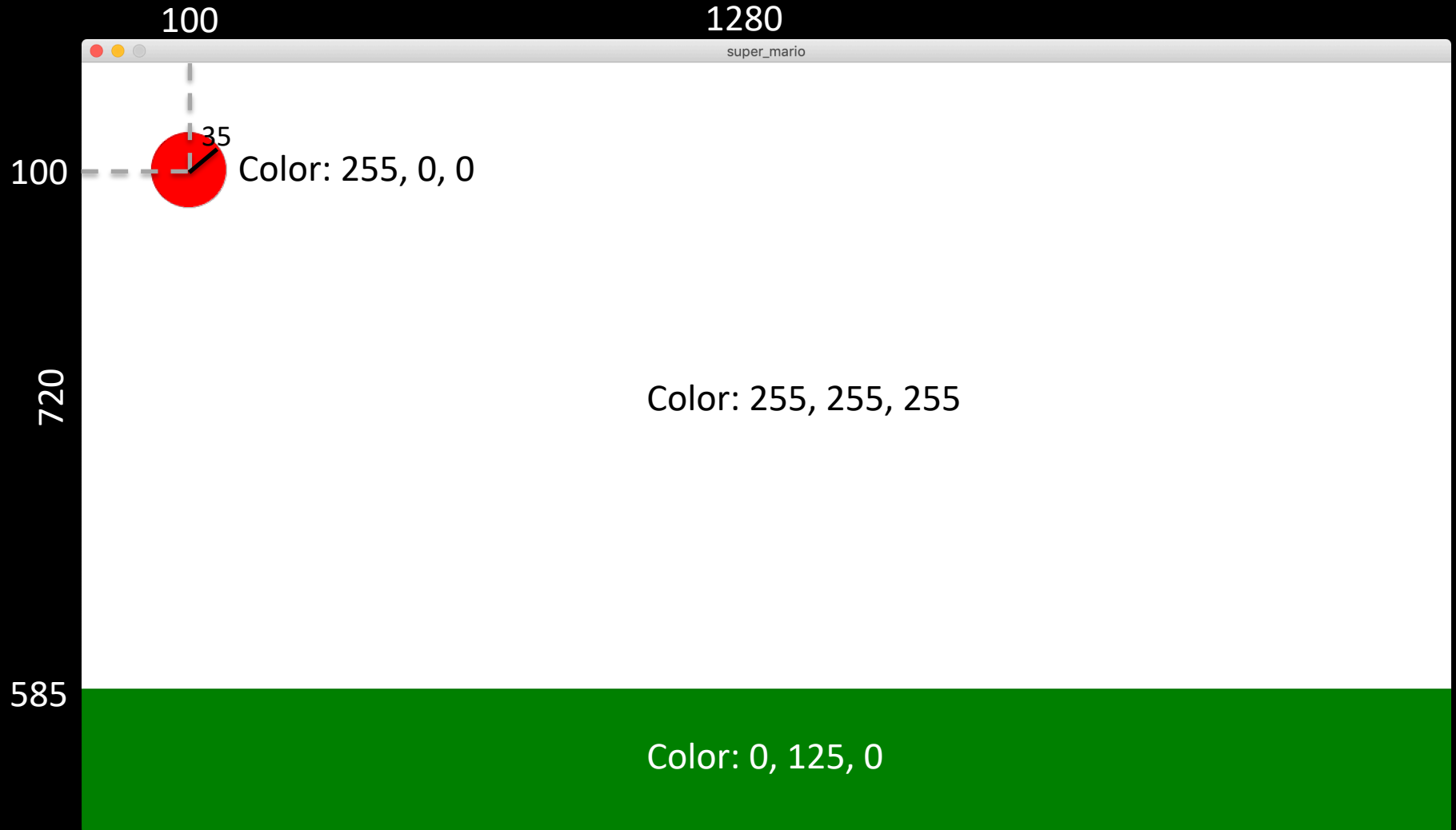


Intro to Computer Science

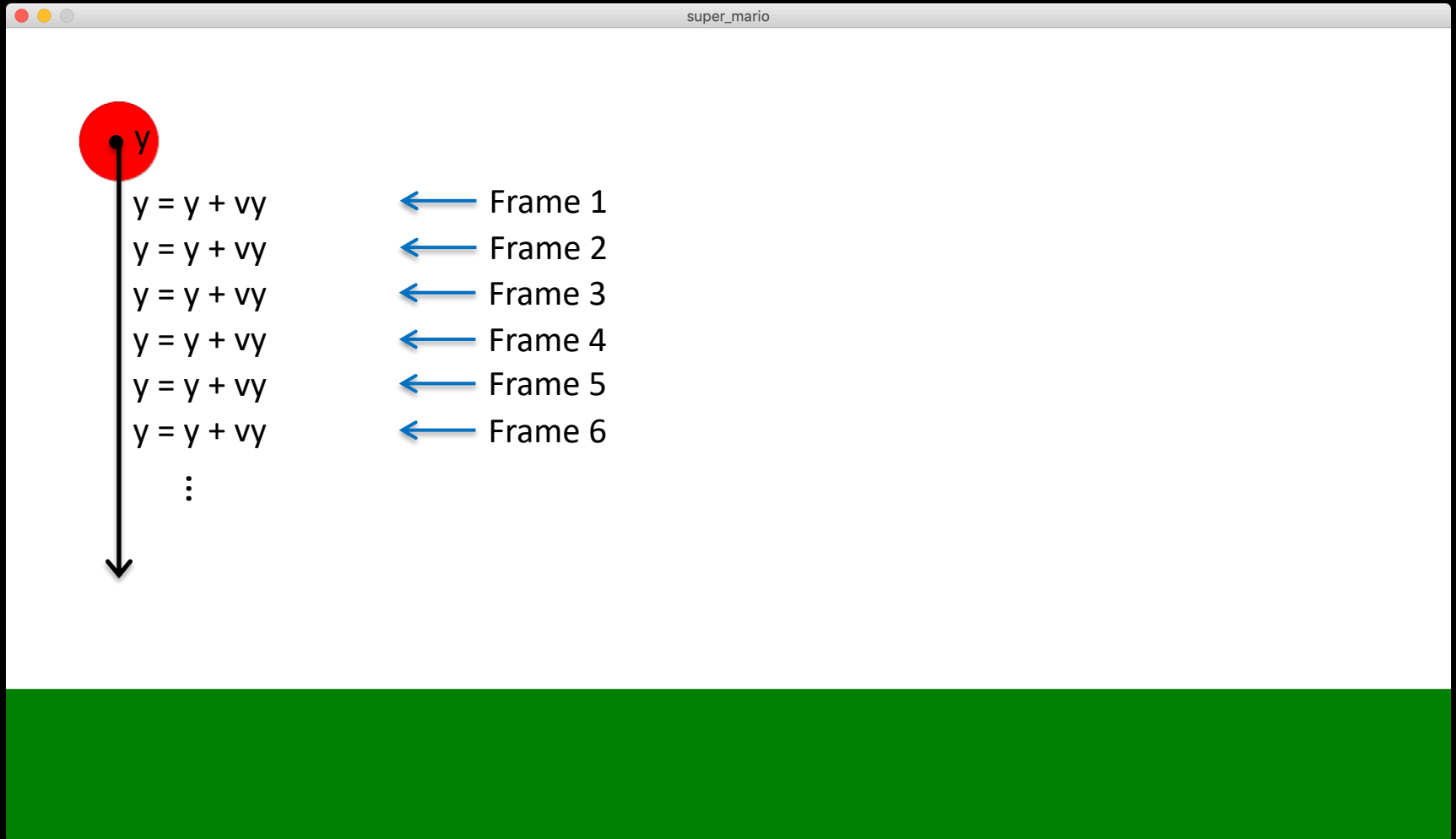
CS-UH 1001, Spring 2022

Super Mario

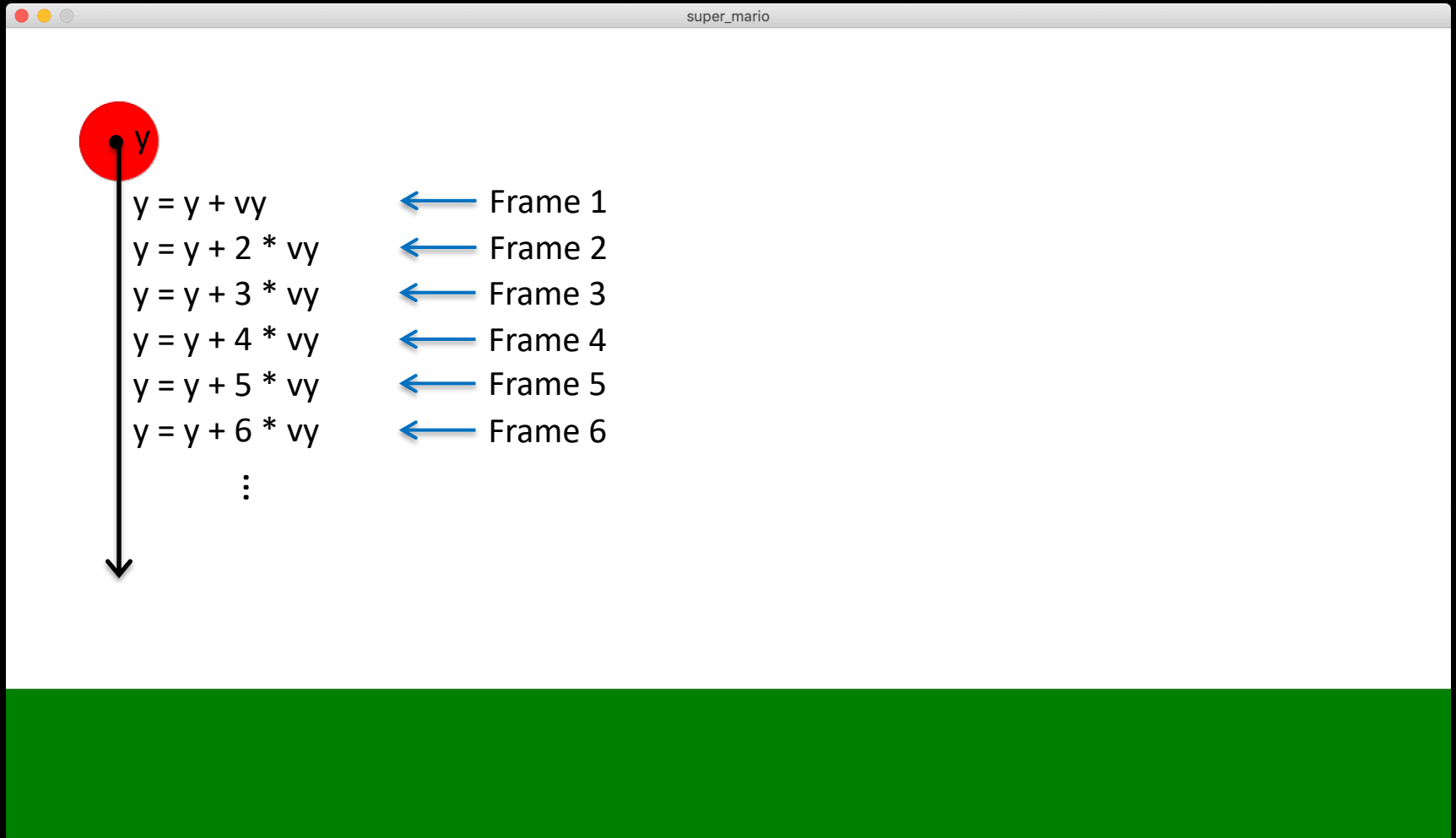
Initial Setup



Velocity

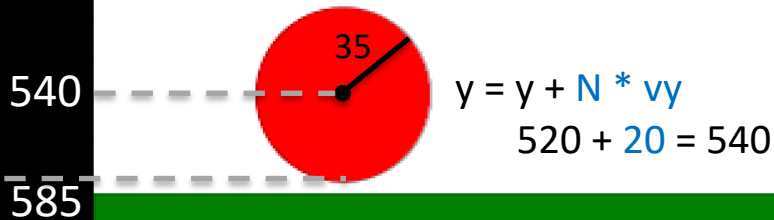


Gravity (Acceleration)

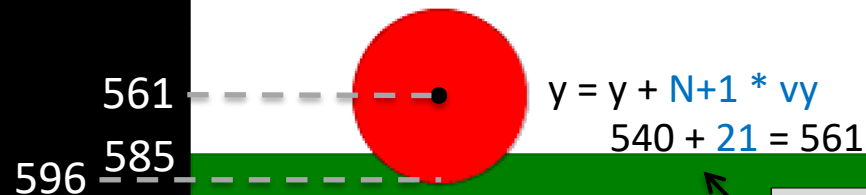


Gravity

Frame N ($y = 520$, $vy = 1$, $N=20$)



Frame N+1 ($y = 540$, $vy = 1$, $N=20$)



if $y + r$ will be larger than the ground:

$$g - (y + r)$$

$$585 - (540 + 35) = 10$$

$$21 \rightarrow 10$$