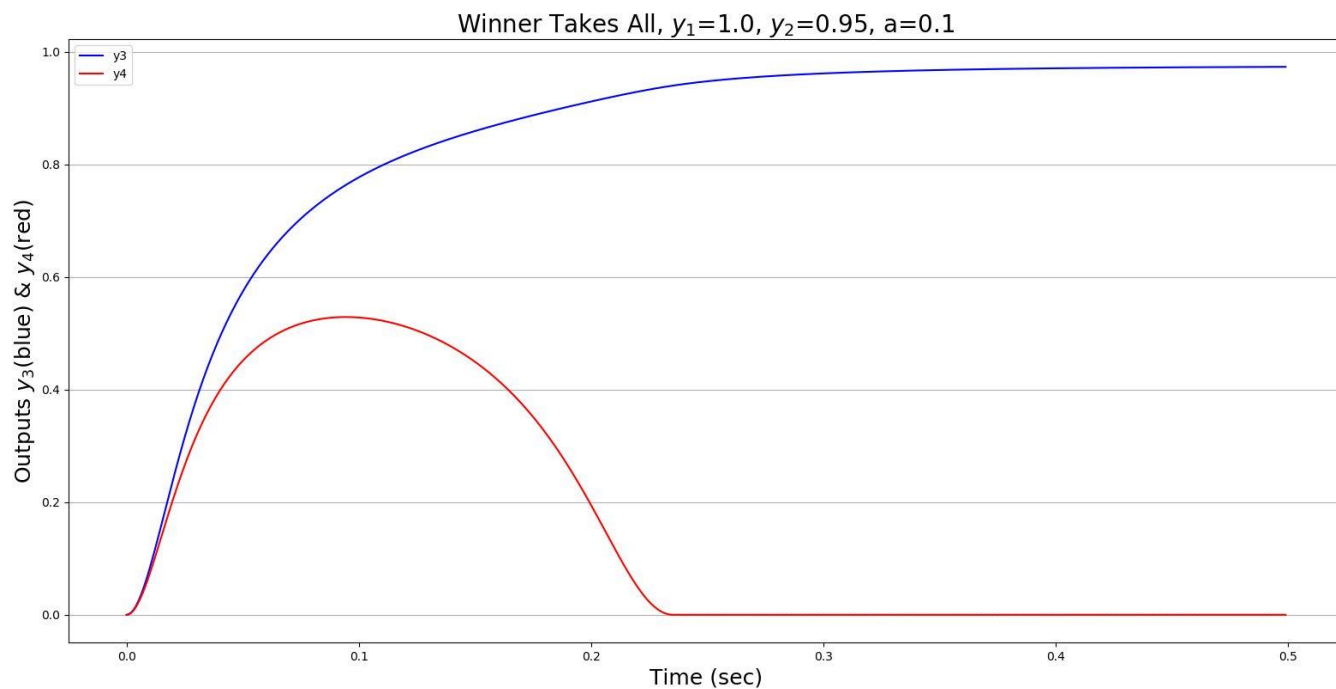
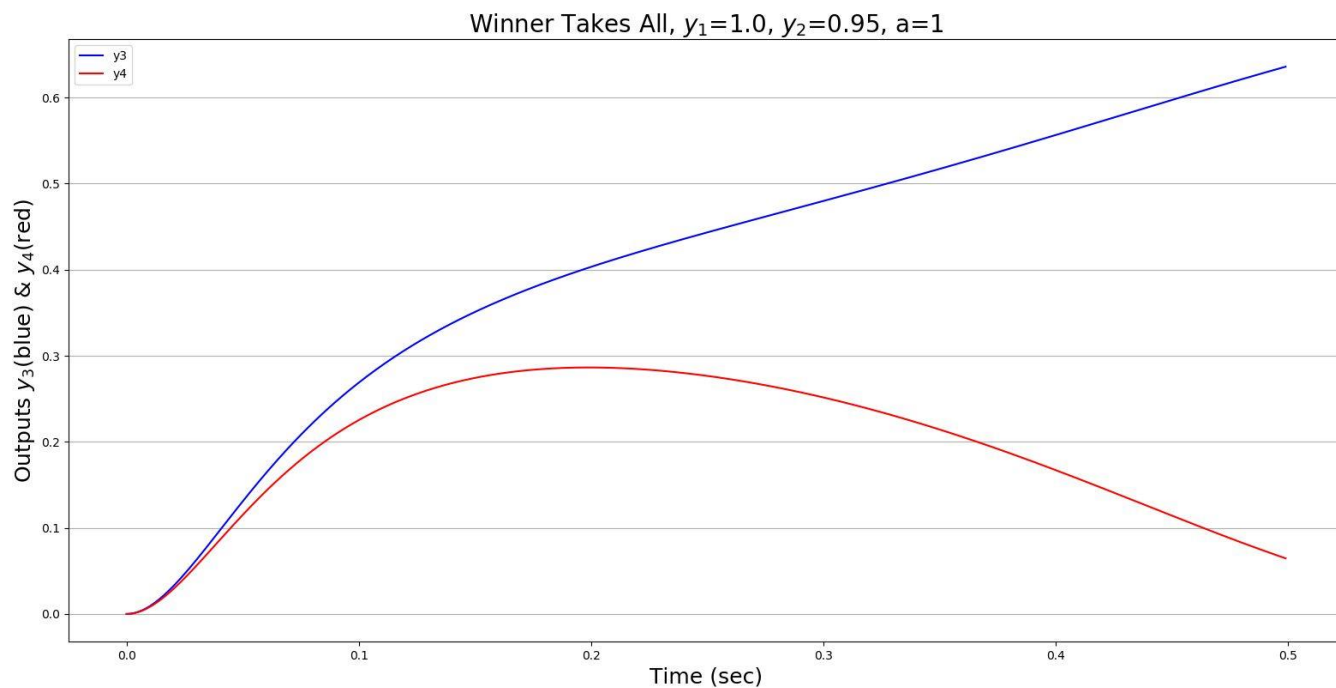


“Winner Takes All”

This is the standard plot from the prompt.



This plot shows what happens when we scale up the a parameter. Notice that it takes much longer for y_3 to win. If you look closely, it never actually goes all the way to 1. Likely, it will reach it with more time.



This plot keeps a the same, but scales the weight from y_4 to y_3 from -1.5 to 1. This makes it so that when y_4 fires it doesn't inhibit y_3 , but excites it. Thus, we can see that y_4 reaches its' maximum faster and y_3 's hump doesn't go as high. Basically, y_3 is winning faster because it isn't being inhibited by y_4 .

Winner Takes All, $y_1=1.0$, $y_2=0.95$, $a=0.1$

$w_{43}=-1.5$, $w_{34}=1$

