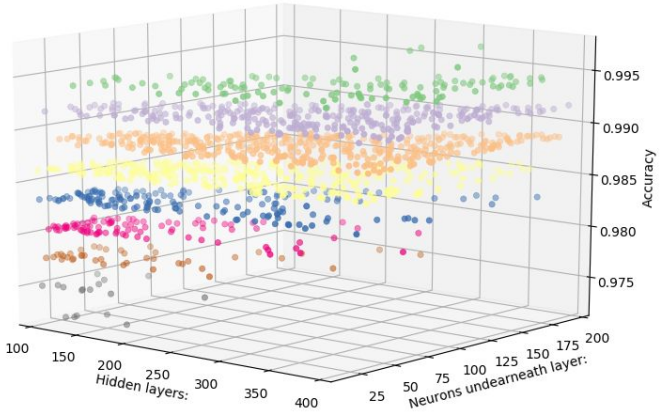
Assignment 2

The Code:

I initially wrote a solution for this task using a manual for loop that essentially tried a bunch of different configurations with the amounts of layers and sublayers. (This file is called Task1_old_version.py) This version also plots out all the accuracies of the different configurations in a 3d plot (See the images). After doing task2 i decided that this would be more clean if i rewrote it using the Grid Search method that i learnt during that assignment. So I rewrote the first task using grid search class/methods. (This file is called task1_grid_search.py). I'm uncertain if this is the method that was intended for solving this task so i included both versions in my submission. (I also included the jupyter notebook i made for the second implementation)



Results:

From my testing the accuracy of using one or two hidden layers where both generally greater than 0.95. So i'm fairly satisfied with my result. Probably due to my fairly exhaustive grid search, the amount of hidden layers probably didn't make that much of a difference, but I generally achieved a higher accuracy with only one hidden layer.