HW-5

In this assignment, you will implement an MLP neural network to classify breast cancer data.

# Breast cancer dataset for classification  
from sklearn.datasets import load\_breast\_cancer

[HW5-Neural-Net.ipynb](https://seattleu.instructure.com/courses/1606753/files/68865672?wrap=1)[Download HW5-Neural-Net.ipynb](https://seattleu.instructure.com/courses/1606753/files/68865672/download?download_frd=1)

We will apply a neural network with 2 hidden layers with a varying number of units (10, 20, 50, 100).  Then we will find out the optimal alpha parameter value for regularization.  We will also apply different activation functions (logistic, tanh, relu) and we will show their effects.  
We should also compare the results without scaling and with scaling.   
Part 2  
Write a short summary of your analysis result of neural networks.