Assignment 4

EE698V – Machine Learning for Signal Processing

Submit your answers here: https://forms.gle/QuY3GBfJoAkbT9FA7

Q1. Complete the following code for a NN based classifier for iris data. Use only numpy library, and implement other functions yourself. **(35 marks)**
https://drive.google.com/open?id=1EBrahr2ZVXcbETRsyuri2b78cS1tCA4n

Note: It will be automatically evaluated by importing the functions you have written. So please use

```
if __name__=="__main__":
```

for lines which are not a part of the function.

Q2.

a. Solve the Q1 using keras library. Use **(20 marks)**

i. sigmoid and mean squared error loss

ii. softmax and categorical cross-entropy loss

Print confusion matrices and plot loss function vs number of epochs in your ipynb.

b. Which of the above two schemes gives better results and why? **(5 marks)**