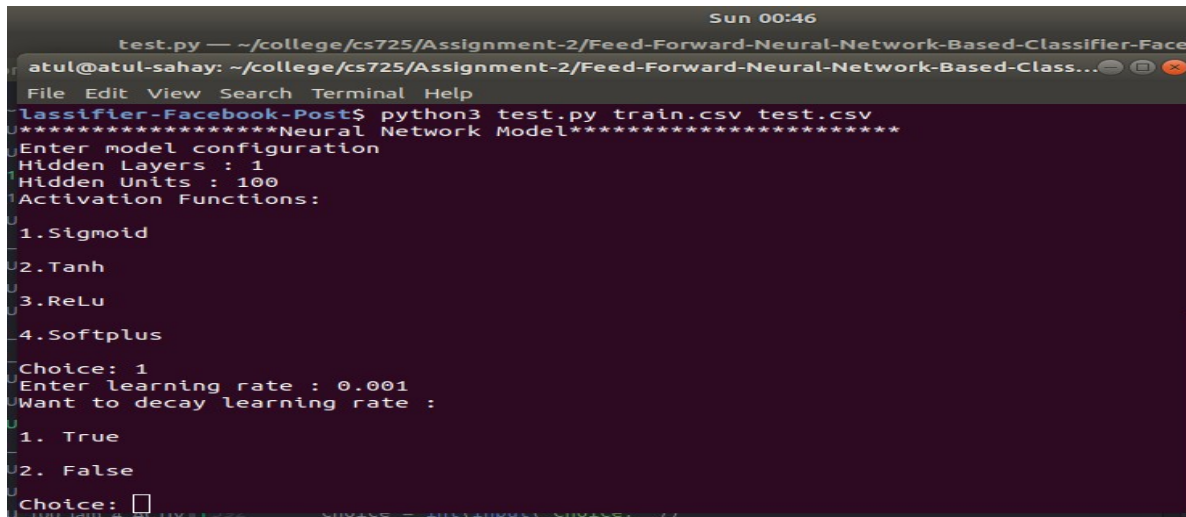


README

TO RUN:

`$ python3 nn.py train.csv test.csv`



```
test.py — ~/college/cs725/Assignment-2/Feed-Forward-Neural-Network-Based-Classfier-Face
atul@atul-sahay: ~/college/cs725/Assignment-2/Feed-Forward-Neural-Network-Based-Class...
File Edit View Search Terminal Help
Classifier-Facebook-Post$ python3 test.py train.csv test.csv
*****Neural Network Model*****
Enter model configuration
Hidden Layers : 1
Hidden Units : 100
Activation Functions:
1. Sigmoid
2. Tanh
3. ReLu
4. Softplus
Choice: 1
Enter learning rate : 0.001
Want to decay learning rate :
1. True
2. False
Choice: 1
Choice: 1
```

Fig 1: Interactive module of neural networks

- Model is made interactive, before running the train module will ask all the network configuration related queries, like number of layers and hidden units on each layer.
- For **Task -2** : Just enter the network configuration accordingly and put $\lambda = 0$ (**NO REGULARIZATION**)
- For **Task – 3** : when asked to whether you want to decay learning rate, choose **TRUE** (See **Fig1**)
- For **Task-3** : Tabel data , vary learning rate and λ and also the network configuration accordingly to see the reported result.
- For **Task-4** : choose from the different activation functions given. Put the choice as **number given**. (See **Fig1**)
- For **Task-5** : Dropout method is implemented, for which dropout percentage should be provided.
NOTE: Choose Dropout percentage accordingly wisely as too much dropout can lead to poor result.