```
C:\Users\lukez\AppData\Local\Microsoft\WindowsApps\python3.10.exe "C:/Users/lukez/Desktop/
CS4641/Untitled Folder/NeuroNetwork.py"
2022-07-19 00:49:54.814150: W tensorflow/stream_executor/platform/default/dso_loader.cc:64]
Could not load dynamic library 'cudart64_110.dll'; dlerror: cudart64_110.dll not found
2022-07-19 00:49:54.814274: I tensorflow/stream_executor/cuda/cudart_stub.cc:29] Ignore
above cudart dlerror if you do not have a GPU set up on your machine.
No. of training examples: 7777
No. of testing examples: 1945
2022-07-19 00:49:57.774848: W tensorflow/stream_executor/platform/default/dso_loader.cc:64]
Could not load dynamic library 'nvcuda.dll'; dlerror: nvcuda.dll not found
2022-07-19 00:49:57.774966: W tensorflow/stream_executor/cuda/cuda_driver.cc:269] failed
call to cuInit: UNKNOWN ERROR (303)
2022-07-19 00:49:57.778053: I tensorflow/stream_executor/cuda/cuda_diagnostics.cc:169]
retrieving CUDA diagnostic information for host: DESKTOP-SKDN5SP
2022-07-19 00:49:57.778212: I tensorflow/stream_executor/cuda/cuda_diagnostics.cc:176]
hostname: DESKTOP-SKDN5SP
2022-07-19 00:49:57.778543: I tensorflow/core/platform/cpu_feature_guard.cc:193] This
TensorFlow binary is optimized with oneAPI Deep Neural Network Library (oneDNN) to use the
following CPU instructions in performance-critical operations:  AVX AVX2
To enable them in other operations, rebuild TensorFlow with the appropriate compiler flags.
Epoch 1/50
778/778 [==============================] - 1s 1ms/step - loss: 1.1633 - accuracy: 0.6805
Epoch 2/50
778/778 [==============================] - 1s 1ms/step - loss: 0.5398 - accuracy: 0.7426
Epoch 3/50
778/778 [==============================] - 1s 937us/step - loss: 0.5090 - accuracy: 0.7640
Epoch 4/50
778/778 [==============================] - 1s 951us/step - loss: 0.4780 - accuracy: 0.7837
Epoch 5/50
778/778 [==============================] - 1s 920us/step - loss: 0.4693 - accuracy: 0.7909
Epoch 6/50
778/778 [==============================] - 1s 920us/step - loss: 0.4599 - accuracy: 0.7913
Epoch 7/50
778/778 [==============================] - 1s 884us/step - loss: 0.4522 - accuracy: 0.7972
Epoch 8/50
778/778 [==============================] - 1s 908us/step - loss: 0.4404 - accuracy: 0.8038
Epoch 9/50
778/778 [==============================] - 1s 931us/step - loss: 0.4287 - accuracy: 0.8103
Epoch 10/50
778/778 [==============================] - 1s 903us/step - loss: 0.4286 - accuracy: 0.8105
Epoch 11/50
778/778 [==============================] - 1s 883us/step - loss: 0.4216 - accuracy: 0.8094
Epoch 12/50
778/778 [==============================] - 1s 898us/step - loss: 0.4205 - accuracy: 0.8101
Epoch 13/50
778/778 [==============================] - 1s 900us/step - loss: 0.4222 - accuracy: 0.8132
Epoch 14/50
778/778 [==============================] - 1s 1ms/step - loss: 0.4204 - accuracy: 0.8103
Epoch 15/50
778/778 [==============================] - 1s 870us/step - loss: 0.4155 - accuracy: 0.8128
Epoch 16/50
778/778 [==============================] - 1s 1ms/step - loss: 0.4126 - accuracy: 0.8148
Epoch 17/50
778/778 [==============================] - 1s 1ms/step - loss: 0.4087 - accuracy: 0.8184
Epoch 18/50
778/778 [==============================] - 1s 965us/step - loss: 0.4074 - accuracy: 0.8178
Epoch 19/50
778/778 [==============================] - 1s 929us/step - loss: 0.4068 - accuracy: 0.8220
Epoch 20/50
778/778 [==============================] - 1s 1ms/step - loss: 0.4043 - accuracy: 0.8213
Epoch 21/50
778/778 [==============================] - 1s 991us/step - loss: 0.4003 - accuracy: 0.8208
Epoch 22/50
778/778 [==============================] - 1s 965us/step - loss: 0.3975 - accuracy: 0.8223
Epoch 23/50
778/778 [==============================] - 1s 987us/step - loss: 0.4015 - accuracy: 0.8218
Epoch 24/50
```

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778/778 [==============================] - 1s 1ms/step - loss: 0.3960 - accuracy: 0.8276
Epoch 25/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3933 - accuracy: 0.8220
Epoch 26/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3946 - accuracy: 0.8255
Epoch 27/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3923 - accuracy: 0.8220
Epoch 28/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3888 - accuracy: 0.8287
Epoch 29/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3870 - accuracy: 0.8240
Epoch 30/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3863 - accuracy: 0.8278
Epoch 31/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3830 - accuracy: 0.8286
Epoch 32/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3824 - accuracy: 0.8310
Epoch 33/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3834 - accuracy: 0.8295
Epoch 34/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3798 - accuracy: 0.8314
Epoch 35/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3777 - accuracy: 0.8303
Epoch 36/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3764 - accuracy: 0.8332
Epoch 37/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3740 - accuracy: 0.8287
Epoch 38/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3770 - accuracy: 0.8330
Epoch 39/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3785 - accuracy: 0.8328
Epoch 40/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3766 - accuracy: 0.8341
Epoch 41/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3739 - accuracy: 0.8314
Epoch 42/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3682 - accuracy: 0.8355
Epoch 43/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3711 - accuracy: 0.8368
Epoch 44/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3697 - accuracy: 0.8358
Epoch 45/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3669 - accuracy: 0.8382
Epoch 46/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3652 - accuracy: 0.8376
Epoch 47/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3690 - accuracy: 0.8358
Epoch 48/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3668 - accuracy: 0.8394
Epoch 49/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3642 - accuracy: 0.8354
Epoch 50/50
778/778 [==============================] - 1s 1ms/step - loss: 0.3638 - accuracy: 0.8382
244/244 [==============================] - 0s 991us/step - loss: 0.3545 - accuracy: 0.8406
Accuracy: 84.06
244/244 [==============================] - 0s 924us/step
              precision    recall  f1-score   support

           0       0.88      0.79      0.83      3896
           1       0.81      0.89      0.85      3881

    accuracy                           0.84      7777
   macro avg       0.84      0.84      0.84      7777
weighted avg       0.84      0.84      0.84      7777


Process finished with exit code 0
```