```
C:\Users\iitfypvmadmin\PycharmProjects\IIT-MSc-FYP-ML\venv\Scripts\python.exe "C:/Program Files/JetBrains/PyCharm 2023.1/plugins/python/helpers/pydev/pydevconsole.py" --mode=client --host=127.0.0.1 --port=52151

import sys; print('Python %s on %s' % (sys.version, sys.platform))
sys.path.extend(['C:\\Users\\iitfypvmadmin\\PycharmProjects\\IIT-MSc-FYP-ML'])

PyDev console: starting.

Python 3.10.10 (tags/v3.10.10:aad5f6a, Feb  7 2023, 17:20:36) [MSC v.1929 64 bit (AMD64)] on win32
>>> runfile('C:\\Users\\iitfypvmadmin\\PycharmProjects\\IIT-MSc-FYP-ML\\ds_train\\CNN_Training.py', wdir='C:\\Users\\iitfypvmadmin\\PycharmProjects\\IIT-MSc-FYP-ML\\ds_train')
Device -  cpu
Full Train Set -  18384
Train Set -  14707
Validation Set -  3677
Test Set -  7982
Available Classes ['□', '□', '□', '□', '□', '□', '□', '□', '□', '□', '□', '□', '□□', '□□', '□□', '□□', '□□', '□□', '□□', '□□\u200d□', '□□\u200d□□', '□□\u200d□□', '□', '□□', '□□', '□□', '□□', '□□', '□□', '□', '□', '□', '□', '□', '□', '□', '□', '□', '□', '□', '□', '□', '□', '□□', '□', '□□', '□□', '□□', '□□', '□□', '□', '□□', '□□', '□□']
Net -  Net(
  (conv1): Conv2d(1, 16, kernel_size=(3, 3), stride=(1, 1), padding=(1, 1))
  (bn1): BatchNorm2d(16, eps=1e-05, momentum=0.1, affine=True, track_running_stats=True)
  (conv2): Conv2d(16, 16, kernel_size=(3, 3), stride=(1, 1), padding=(1, 1))
  (bn2): BatchNorm2d(16, eps=1e-05, momentum=0.1, affine=True, track_running_stats=True)
  (pool1): MaxPool2d(kernel_size=2, stride=2, padding=0, dilation=1, ceil_mode=False)
  (conv3): Conv2d(16, 32, kernel_size=(3, 3), stride=(1, 1), padding=(1, 1))
  (bn3): BatchNorm2d(32, eps=1e-05, momentum=0.1, affine=True, track_running_stats=True)
  (conv4): Conv2d(32, 32, kernel_size=(3, 3), stride=(1, 1), padding=(1, 1))
  (bn4): BatchNorm2d(32, eps=1e-05, momentum=0.1, affine=True, track_running_stats=True)
  (pool2): MaxPool2d(kernel_size=2, stride=2, padding=0, dilation=1, ceil_mode=False)
  (conv5): Conv2d(32, 64, kernel_size=(3, 3), stride=(1, 1), padding=(1, 1))
  (bn5): BatchNorm2d(64, eps=1e-05, momentum=0.1, affine=True, track_running_stats=True)
  (conv6): Conv2d(64, 64, kernel_size=(3, 3), stride=(1, 1), padding=(1, 1))
  (bn6): BatchNorm2d(64, eps=1e-05, momentum=0.1, affine=True, track_running_stats=True)
  (pool3): MaxPool2d(kernel_size=2, stride=2, padding=0, dilation=1, ceil_mode=False)
  (fc1): Linear(in_features=4096, out_features=1024, bias=True)
  (bn7): BatchNorm1d(1024, eps=1e-05, momentum=0.1, affine=True, track_running_stats=True)
  (fc2): Linear(in_features=1024, out_features=256, bias=True)
  (bn8): BatchNorm1d(256, eps=1e-05, momentum=0.1, affine=True, track_running_stats=True)
  (fc3): Linear(in_features=256, out_features=62, bias=True)
)
-------------------------------------------------
[1,   100] loss: 0.004
[1,   200] loss: 0.004
EPOCH              : 1
Training loss      : 0.6072895861647913
Training accuracy  : 84.74875909430884%
Validation loss    : 0.2509141638773694
Validation accuracy: 93.69050856676638%
-------------------------------------------------
[2,   100] loss: 0.002
[2,   200] loss: 0.003
EPOCH              : 2
Training loss      : 0.1866052173908379
Training accuracy  : 95.58713537771129%
Validation loss    : 0.21311334413388905
Validation accuracy: 94.72395974979602%
-------------------------------------------------
[3,   100] loss: 0.002
[3,   200] loss: 0.001
EPOCH              : 3
Training loss      : 0.15179915423946702
Training accuracy  : 96.7294485619093%
Validation loss    : 0.20174819955626097
Validation accuracy: 95.40386184389448%
-------------------------------------------------
```

```
[4,   100] loss: 0.001
[4,   200] loss: 0.002
EPOCH              : 4
Training loss      : 0.14982159758453878
Training accuracy  : 96.81104236078058%
Validation loss    : 0.18944280835510371
Validation accuracy: 95.78460701658962%
---------------------------------------------------
[5,   100] loss: 0.002
[5,   200] loss: 0.002
EPOCH              : 5
Training loss      : 0.14695998764284496
Training accuracy  : 97.0898211735908%
Validation loss    : 0.17113893369893066
Validation accuracy: 96.00217568670112%
---------------------------------------------------
[6,   100] loss: 0.002
[6,   200] loss: 0.002
EPOCH              : 6
Training loss      : 0.13551712172307157
Training accuracy  : 97.38219895287958%
Validation loss    : 0.2531927452160024
Validation accuracy: 93.52733206418276%
---------------------------------------------------
[7,   100] loss: 0.002
[7,   200] loss: 0.002
EPOCH              : 7
Training loss      : 0.13216977405736147
Training accuracy  : 97.42979533555545%
Validation loss    : 0.1791645148087689
Validation accuracy: 96.43731302692412%
---------------------------------------------------
[8,   100] loss: 0.001
[8,   200] loss: 0.002
EPOCH              : 8
Training loss      : 0.12287972041020025
Training accuracy  : 97.89216019582511%
Validation loss    : 0.21546483137116731
Validation accuracy: 94.64237149850422%
---------------------------------------------------
[9,   100] loss: 0.001
[9,   200] loss: 0.001
EPOCH              : 9
Training loss      : 0.121763795077245551
Training accuracy  : 97.89895967906439%
Validation loss    : 0.16082389062275082
Validation accuracy: 96.54609736197988%
---------------------------------------------------
[10,   100] loss: 0.001
[10,   200] loss: 0.002
EPOCH              : 10
Training loss      : 0.12289603612291146
Training accuracy  : 97.6881756986469%
Validation loss    : 0.141912975031168826
Validation accuracy: 97.19880337231439%
---------------------------------------------------
[11,   100] loss: 0.001
[11,   200] loss: 0.001
EPOCH              : 11
Training loss      : 0.10859063800449414
Training accuracy  : 98.34772557285646%
Validation loss    : 0.160037513657176444
Validation accuracy: 96.51890127821594%
---------------------------------------------------
[12,   100] loss: 0.001
[12,   200] loss: 0.001
EPOCH              : 12
Training loss      : 0.10249395073655752
```

```
Training accuracy  : 98.35452505609574%
Validation loss    : 0.17467470392118759
Validation accuracy: 96.43731302692412%
--------------------------------------------------
[13,   100] loss: 0.001
[13,   200] loss: 0.002
EPOCH              : 13
Training loss      : 0.09056286318358732
Training accuracy  : 98.78289250017%
Validation loss    : 0.16237154070501714
Validation accuracy: 96.57329344574381%
--------------------------------------------------
[14,   100] loss: 0.001
[14,   200] loss: 0.002
EPOCH              : 14
Training loss      : 0.10612952295001038
Training accuracy  : 98.33412660637792%
Validation loss    : 0.17944993718603497
Validation accuracy: 96.24694044057655%
--------------------------------------------------
[15,   100] loss: 0.001
[15,   200] loss: 0.002
EPOCH              : 15
Training loss      : 0.09913826802573343
Training accuracy  : 98.54491058679541%
Validation loss    : 0.15647868381300017
Validation accuracy: 96.81805819961926%
--------------------------------------------------
[16,   100] loss: 0.001
[16,   200] loss: 0.001
EPOCH              : 16
Training loss      : 0.09022936315517693
Training accuracy  : 98.70809818453797%
Validation loss    : 0.15577384833573713
Validation accuracy: 97.03562686973076%
--------------------------------------------------
[17,   100] loss: 0.001
[17,   200] loss: 0.001
EPOCH              : 17
Training loss      : 0.08908118437786937
Training accuracy  : 98.75569456721288%
Validation loss    : 0.15160120314867043
Validation accuracy: 96.8452542833832%
--------------------------------------------------
[18,   100] loss: 0.001
[18,   200] loss: 0.002
EPOCH              : 18
Training loss      : 0.08462703789715992
Training accuracy  : 98.94608009791256%
Validation loss    : 0.15613663608301
Validation accuracy: 96.95403861843894%
--------------------------------------------------
[19,   100] loss: 0.001
[19,   200] loss: 0.001
EPOCH              : 19
Training loss      : 0.08761450169063274
Training accuracy  : 98.78969198340926%
Validation loss    : 0.12097671234902721
Validation accuracy: 97.49796029371771%
--------------------------------------------------
[20,   100] loss: 0.001
[20,   200] loss: 0.001
EPOCH              : 20
Training loss      : 0.07091873887038015
Training accuracy  : 99.2452573604406%
Validation loss    : 0.1403764385485863
Validation accuracy: 97.66113679630134%
--------------------------------------------------
```

```
199 [21,   100] loss: 0.001
200 [21,   200] loss: 0.001
201 EPOCH              : 21
202 Training loss      : 0.0904894401824976
203 Training accuracy  : 98.78969198340926%
204 Validation loss    : 0.14673782652864517
205 Validation accuracy: 97.09001903725863%
206 ---------------------------------------------------
207 [22,   100] loss: 0.001
208 [22,   200] loss: 0.002
209 EPOCH              : 22
210 Training loss      : 0.08399281381320571
211 Training accuracy  : 98.92568164819474%
212 Validation loss    : 0.1302669043122085
213 Validation accuracy: 97.6339407125374%
214 ---------------------------------------------------
215 [23,   100] loss: 0.001
216 [23,   200] loss: 0.001
217 EPOCH              : 23
218 Training loss      : 0.07649179564996264
219 Training accuracy  : 99.12286666213367%
220 Validation loss    : 0.14492086330638945
221 Validation accuracy: 97.55235246124558%
222 ---------------------------------------------------
223 [24,   100] loss: 0.001
224 [24,   200] loss: 0.000
225 EPOCH              : 24
226 Training loss      : 0.07756460238226073
227 Training accuracy  : 99.03447338002312%
228 Validation loss    : 0.12387923348815602
229 Validation accuracy: 97.96029371770464%
230 ---------------------------------------------------
231 [25,   100] loss: 0.001
232 [25,   200] loss: 0.001
233 EPOCH              : 25
234 Training loss      : 0.07304306241667893
235 Training accuracy  : 99.25885632691916%
236 Validation loss    : 0.14806449838004943
237 Validation accuracy: 97.44356812618983%
238 ---------------------------------------------------
239 [26,   100] loss: 0.000
240 [26,   200] loss: 0.001
241 EPOCH              : 26
242 Training loss      : 0.08314722758175329
243 Training accuracy  : 99.06167131298021%
244 Validation loss    : 0.1314577249719424
245 Validation accuracy: 97.44356812618983%
246 ---------------------------------------------------
247 [27,   100] loss: 0.000
248 [27,   200] loss: 0.001
249 EPOCH              : 27
250 Training loss      : 0.08152422782897689
251 Training accuracy  : 98.92568164819474%
252 Validation loss    : 0.150615989562120 97
253 Validation accuracy: 97.2803916236062%
254 ---------------------------------------------------
255 [28,   100] loss: 0.000
256 [28,   200] loss: 0.001
257 EPOCH              : 28
258 Training loss      : 0.07535492793508768
259 Training accuracy  : 99.09566872917658%
260 Validation loss    : 0.123806168535723 78
261 Validation accuracy: 97.82431329888496%
262 ---------------------------------------------------
263 [29,   100] loss: 0.001
264 [29,   200] loss: 0.001
265 EPOCH              : 29
266 Training loss      : 0.07433247923680796
```

```
Training accuracy  : 99.23165839396206%
Validation loss    : 0.1317163744405913
Validation accuracy: 97.6339407125374%
--------------------------------------------------
[30,   100] loss: 0.001
[30,   200] loss: 0.001
EPOCH              : 30
Training loss      : 0.0722975989059855
Training accuracy  : 99.33365064255116%
Validation loss    : 0.125176745846053
Validation accuracy: 97.87870546641284%
--------------------------------------------------
[31,   100] loss: 0.001
[31,   200] loss: 0.001
EPOCH              : 31
Training loss      : 0.06617567961841889
Training accuracy  : 99.428843407901%
Validation loss    : 0.1370081959906758
Validation accuracy: 97.36197987489801%
--------------------------------------------------
[32,   100] loss: 0.001
[32,   200] loss: 0.001
EPOCH              : 32
Training loss      : 0.08019930538885078
Training accuracy  : 99.19086149452642%
Validation loss    : 0.12869811343342707
Validation accuracy: 97.6339407125374%
--------------------------------------------------
[33,   100] loss: 0.001
[33,   200] loss: 0.001
EPOCH              : 33
Training loss      : 0.06795962293572613
Training accuracy  : 99.29965322635479%
Validation loss    : 0.14376820920114775
Validation accuracy: 97.22599945607833%
--------------------------------------------------
[34,   100] loss: 0.000
[34,   200] loss: 0.001
EPOCH              : 34
Training loss      : 0.07722607535638937
Training accuracy  : 99.17726252804786%
Validation loss    : 0.13686562887767037
Validation accuracy: 97.52515637748164%
--------------------------------------------------
[35,   100] loss: 0.001
[35,   200] loss: 0.001
EPOCH              : 35
Training loss      : 0.07549397581624022
Training accuracy  : 99.1704630448086%
Validation loss    : 0.14665292085497672
Validation accuracy: 97.22599945607833%
--------------------------------------------------
[36,   100] loss: 0.001
[36,   200] loss: 0.001
EPOCH              : 36
Training loss      : 0.0657287595905437
Training accuracy  : 99.428843407901%
Validation loss    : 0.1432969381474009
Validation accuracy: 97.47076420995377%
--------------------------------------------------
[37,   100] loss: 0.001
[37,   200] loss: 0.000
EPOCH              : 37
Training loss      : 0.06270938261835793
Training accuracy  : 99.54443462296865%
Validation loss    : 0.12650959732288053
Validation accuracy: 97.8515093826489%
--------------------------------------------------
```

```
[38,   100] loss: 0.001
[38,   200] loss: 0.002
EPOCH              : 38
Training loss      : 0.06806278471928236
Training accuracy  : 99.48323927381519%
Validation loss    : 0.14574265447621246
Validation accuracy: 97.57954854500952%
-------------------------------------------------
[39,   100] loss: 0.001
[39,   200] loss: 0.001
EPOCH              : 39
Training loss      : 0.0854385613649425
Training accuracy  : 98.93248113143402%
Validation loss    : 0.14694370502423162
Validation accuracy: 96.95403861843894%
-------------------------------------------------
[40,   100] loss: 0.001
[40,   200] loss: 0.001
EPOCH              : 40
Training loss      : 0.07022145319383781
Training accuracy  : 99.23845787720133%
Validation loss    : 0.13264155524043503
Validation accuracy: 97.66113679630134%
-------------------------------------------------
[41,   100] loss: 0.001
[41,   200] loss: 0.000
EPOCH              : 41
Training loss      : 0.06342557822611554
Training accuracy  : 99.49003875705446%
Validation loss    : 0.10982384057935891
Validation accuracy: 98.47701930921947%
-------------------------------------------------
[42,   100] loss: 0.001
[42,   200] loss: 0.000
EPOCH              : 42
Training loss      : 0.06396538530239365
Training accuracy  : 99.51043720677228%
Validation loss    : 0.13836492401508976
Validation accuracy: 97.68833288006527%
-------------------------------------------------
[43,   100] loss: 0.001
[43,   200] loss: 0.001
EPOCH              : 43
Training loss      : 0.0605373985788277
Training accuracy  : 99.5580335894472%
Validation loss    : 0.13621725237236615
Validation accuracy: 97.41637204242589%
-------------------------------------------------
[44,   100] loss: 0.001
[44,   200] loss: 0.001
EPOCH              : 44
Training loss      : 0.07715875426277051
Training accuracy  : 99.21805942748351%
Validation loss    : 0.15172424457758577
Validation accuracy: 97.30758770737013%
-------------------------------------------------
[45,   100] loss: 0.001
[45,   200] loss: 0.000
EPOCH              : 45
Training loss      : 0.07220838794071474
Training accuracy  : 99.23165839396206%
Validation loss    : 0.1155893667774548
Validation accuracy: 98.04188196899646%
-------------------------------------------------
[46,   100] loss: 0.001
[46,   200] loss: 0.001
EPOCH              : 46
Training loss      : 0.07056136879272834
```

```
Training accuracy  : 99.25885632691916%
Validation loss    : 0.1401312773986974
Validation accuracy: 97.14441120478651%
-------------------------------------------------
[47,   100] loss: 0.000
[47,   200] loss: 0.001
EPOCH              : 47
Training loss      : 0.06210463936375738
Training accuracy  : 99.50363772353302%
Validation loss    : 0.12711029335439028
Validation accuracy: 97.8515093826489%
-------------------------------------------------
[48,   100] loss: 0.000
[48,   200] loss: 0.001
EPOCH              : 48
Training loss      : 0.06383037920543515
Training accuracy  : 99.49003875705446%
Validation loss    : 0.153279294518955
Validation accuracy: 97.41637204242589%
-------------------------------------------------
[49,   100] loss: 0.001
[49,   200] loss: 0.001
EPOCH              : 49
Training loss      : 0.07519570712189853
Training accuracy  : 99.12966614537295%
Validation loss    : 0.14601263443607335
Validation accuracy: 97.38917595866195%
-------------------------------------------------
[50,   100] loss: 0.001
[50,   200] loss: 0.001
EPOCH              : 50
Training loss      : 0.06372780156928289
Training accuracy  : 99.56483307268648%
Validation loss    : 0.13119962839837757
Validation accuracy: 97.82431329888496%
-------------------------------------------------
[51,   100] loss: 0.000
[51,   200] loss: 0.001
EPOCH              : 51
Training loss      : 0.06354362423012888
Training accuracy  : 99.47643979057591%
Validation loss    : 0.16328187724122023
Validation accuracy: 96.89964645091106%
-------------------------------------------------
[52,   100] loss: 0.001
[52,   200] loss: 0.001
EPOCH              : 52
Training loss      : 0.07299092601868981
Training accuracy  : 99.18406201128714%
Validation loss    : 0.13128769848377186
Validation accuracy: 97.90590155017678%
-------------------------------------------------
[53,   100] loss: 0.001
[53,   200] loss: 0.001
EPOCH              : 53
Training loss      : 0.0632688007940286
Training accuracy  : 99.51043720677228%
Validation loss    : 0.13189064616705692
Validation accuracy: 97.52515637748164%
-------------------------------------------------
[54,   100] loss: 0.001
[54,   200] loss: 0.001
EPOCH              : 54
Training loss      : 0.06318633093697425
Training accuracy  : 99.53763513972937%
Validation loss    : 0.12604939610146945
Validation accuracy: 97.71552896382921%
-------------------------------------------------
```

```
[55,   100] loss: 0.001
[55,   200] loss: 0.001
EPOCH              : 55
Training loss      : 0.06929698233261726
Training accuracy  : 99.36084857550826%
Validation loss    : 0.13976022332849988
Validation accuracy: 97.36197987489801%
-------------------------------------------------
[56,   100] loss: 0.001
[56,   200] loss: 0.000
EPOCH              : 56
Training loss      : 0.0732740911302977
Training accuracy  : 99.17726252804786%
Validation loss    : 0.13844136313831867
Validation accuracy: 97.44356812618983%
-------------------------------------------------
[57,   100] loss: 0.000
[57,   200] loss: 0.001
EPOCH              : 57
Training loss      : 0.06901321747029525
Training accuracy  : 99.33365064255116%
Validation loss    : 0.13587239049912017
Validation accuracy: 97.17160728855045%
-------------------------------------------------
[58,   100] loss: 0.001
[58,   200] loss: 0.000
EPOCH              : 58
Training loss      : 0.06630983025680597
Training accuracy  : 99.354049092269%
Validation loss    : 0.12184186321514795
Validation accuracy: 97.74272504759314%
-------------------------------------------------
[59,   100] loss: 0.001
[59,   200] loss: 0.001
EPOCH              : 59
Training loss      : 0.05847649465826647
Training accuracy  : 99.56483307268648%
Validation loss    : 0.13531400504435148
Validation accuracy: 97.66113679630134%
-------------------------------------------------
[60,   100] loss: 0.000
[60,   200] loss: 0.001
EPOCH              : 60
Training loss      : 0.07085313185509425
Training accuracy  : 99.36084857550826%
Validation loss    : 0.12513721835396036
Validation accuracy: 97.79711721512102%
-------------------------------------------------
[61,   100] loss: 0.001
[61,   200] loss: 0.001
EPOCH              : 61
Training loss      : 0.06476105626097768
Training accuracy  : 99.37444754198681%
Validation loss    : 0.13873852761439534
Validation accuracy: 97.68833288006527%
-------------------------------------------------
[62,   100] loss: 0.000
[62,   200] loss: 0.001
EPOCH              : 62
Training loss      : 0.06704337599162882
Training accuracy  : 99.34724960902972%
Validation loss    : 0.12568990640222685
Validation accuracy: 97.82431329888496%
-------------------------------------------------
GroundTruth:     □□    □□    □□    □□    □□     □     □     □    □□    □□
Predicted:     □□    □□    □□    □□    □□     □     □     □     □    □□
Accuracy of the network on the test images: 92.069657 %
Non-normalized Confusion Matrix
```

```
Confusion Matrix for Test Set
[[31  0  0 ...  0  0  0]
 [ 0 44  0 ...  0  0  0]
 [ 0  0 40 ...  0  0  0]
 ...
 [ 0  2  0 ... 44  0  0]
 [ 0  0  0 ...  0 43  0]
 [ 7  0  2 ...  0  0 53]]
Classification report
              precision    recall  f1-score   support

           0       0.94      0.80      0.86        60
           1       0.79      1.00      0.88        48
           2       0.86      0.76      0.81        63
           3       0.81      0.81      0.81        54
           4       0.74      0.88      0.80        56
           5       0.60      0.95      0.74        43
           6       0.81      0.98      0.89        44
           7       0.89      0.72      0.80        69
           8       0.84      0.86      0.85        81
           9       0.82      0.93      0.87        71
          10       0.98      0.69      0.81        89
          11       0.83      0.81      0.82       111
          12       0.96      0.96      0.96       118
          13       0.94      0.77      0.85       118
          14       0.90      0.90      0.90        91
          15       0.80      0.82      0.81       110
          16       0.79      0.84      0.81       109
          17       0.69      0.77      0.73        96
          18       0.90      0.66      0.76       104
          19       0.94      0.91      0.92        96
          20       0.81      0.87      0.84       124
          21       0.90      0.71      0.79       134
          22       0.90      0.75      0.82       122
          23       0.71      0.95      0.81        37
          24       0.81      0.88      0.84        43
          25       0.70      0.92      0.80        49
          26       0.79      0.82      0.80        50
          27       0.80      0.74      0.77        50
          28       0.76      0.84      0.80        57
          29       0.49      0.90      0.63        41
          30       0.90      0.73      0.81        64
          31       0.96      0.96      0.96       180
          32       0.99      0.99      0.99       180
          33       1.00      0.99      0.99       180
          34       0.97      0.93      0.95       180
          35       1.00      0.98      0.99       180
          36       0.98      1.00      0.99       180
          37       0.99      0.99      0.99       180
          38       0.94      0.97      0.96       180
          39       0.98      0.97      0.97       180
          40       0.99      0.98      0.99       180
          41       0.83      0.87      0.85       180
          42       0.89      0.85      0.87       180
          43       1.00      0.99      0.99       180
          44       0.99      0.99      0.99       180
          45       0.96      0.96      0.96       180
          46       0.94      0.93      0.93       180
          47       0.91      0.96      0.93       180
          48       0.96      0.91      0.93       180
          49       0.93      0.96      0.95       180
          50       0.99      0.99      0.99       180
          51       0.98      0.94      0.96       180
          52       0.97      0.96      0.96       180
          53       0.96      0.95      0.96       180
          54       0.87      0.97      0.92       180
          55       0.98      0.98      0.98       180
          56       0.98      0.97      0.98       180
```

```
607           57       0.97      0.97      0.97       180
608           58       0.95      0.98      0.96       180
609           59       0.99      0.98      0.99       180
610           60       0.99      0.98      0.99       180
611           61       0.99      0.98      0.99       180
612
613     accuracy                           0.92      7982
614    macro avg       0.89      0.90      0.89      7982
615 weighted avg       0.93      0.92      0.92      7982
616
617 Training completed! Trained model saved to: ../ds_trained/SinhalaTamil_CNN_Trained.pt
618
```