```
Epoch 1/30
15/15 ─────────────────── 50s 3s/step - accuracy: 0.1039 - loss: 6.8215 - val_accuracy: 0.1000 -
val_loss: 2.2816
Epoch 2/30
15/15 ─────────────────── 41s 3s/step - accuracy: 0.1166 - loss: 2.2644 - val_accuracy: 0.2500 -
val_loss: 2.1873
Epoch 3/30
15/15 ─────────────────── 37s 2s/step - accuracy: 0.2031 - loss: 2.1419 - val_accuracy: 0.3000 -
val_loss: 1.9705
Epoch 4/30
15/15 ─────────────────── 33s 2s/step - accuracy: 0.3220 - loss: 1.9320 - val_accuracy: 0.4500 -
val_loss: 1.8225
Epoch 5/30
15/15 ─────────────────── 32s 2s/step - accuracy: 0.4295 - loss: 1.5931 - val_accuracy: 0.4500 -
val_loss: 1.5218
Epoch 6/30
15/15 ─────────────────── 40s 3s/step - accuracy: 0.5704 - loss: 1.3213 - val_accuracy: 0.5000 -
val_loss: 1.4806
Epoch 7/30
15/15 ─────────────────── 37s 3s/step - accuracy: 0.5908 - loss: 1.2146 - val_accuracy: 0.6000 -
val_loss: 1.3708
Epoch 8/30
15/15 ─────────────────── 43s 3s/step - accuracy: 0.6910 - loss: 0.9778 - val_accuracy: 0.5500 -
val_loss: 1.2757
Epoch 9/30
15/15 ─────────────────── 42s 3s/step - accuracy: 0.7535 - loss: 0.7944 - val_accuracy: 0.7500 -
val_loss: 1.0194
Epoch 10/30
15/15 ─────────────────── 37s 2s/step - accuracy: 0.7898 - loss: 0.6537 - val_accuracy: 0.6500 -
val_loss: 1.4282
Epoch 11/30
15/15 ─────────────────── 32s 2s/step - accuracy: 0.8124 - loss: 0.5601 - val_accuracy: 0.7000 -
val_loss: 1.0019
```

```
val_loss: 1.0019
Epoch 12/30
15/15 ───────────────── 34s 2s/step - accuracy: 0.8373 - loss: 0.4583 - val_accuracy: 0.7000 -
val_loss: 1.1332
Epoch 13/30
15/15 ───────────────── 46s 3s/step - accuracy: 0.8382 - loss: 0.4767 - val_accuracy: 0.6500 -
val_loss: 1.2997
Epoch 14/30
15/15 ───────────────── 45s 3s/step - accuracy: 0.9076 - loss: 0.3276 - val_accuracy: 0.7000 -
val_loss: 1.4242
Epoch 15/30
15/15 ───────────────── 37s 2s/step - accuracy: 0.8975 - loss: 0.3478 - val_accuracy: 0.6500 -
val_loss: 1.5781
Epoch 16/30
15/15 ───────────────── 40s 3s/step - accuracy: 0.9026 - loss: 0.2793 - val_accuracy: 0.6500 -
val_loss: 1.4322
Epoch 17/30
15/15 ───────────────── 40s 3s/step - accuracy: 0.9486 - loss: 0.1798 - val_accuracy: 0.7000 -
val_loss: 1.3756
Epoch 18/30
15/15 ───────────────── 40s 3s/step - accuracy: 0.9416 - loss: 0.1881 - val_accuracy: 0.7000 -
val_loss: 1.3597
Epoch 19/30
15/15 ───────────────── 41s 3s/step - accuracy: 0.9403 - loss: 0.2075 - val_accuracy: 0.6500 -
val_loss: 1.6140
Epoch 20/30
15/15 ───────────────── 39s 3s/step - accuracy: 0.9407 - loss: 0.1785 - val_accuracy: 0.6500 -
val_loss: 1.2173
Epoch 21/30
15/15 ───────────────── 40s 3s/step - accuracy: 0.9547 - loss: 0.1459 - val_accuracy: 0.7000 -
val_loss: 1.1987
Epoch 22/30
15/15 ───────────────── 40s 3s/step - accuracy: 0.9737 - loss: 0.1153 - val_accuracy: 0.7000 -
```

IPython Console   History

```
Epoch 20/30
15/15 ─────────────────── 39s 3s/step - accuracy: 0.9407 - loss: 0.1785 - val_accuracy: 0.6500 -
val_loss: 1.2173
Epoch 21/30
15/15 ─────────────────── 40s 3s/step - accuracy: 0.9547 - loss: 0.1459 - val_accuracy: 0.7000 -
val_loss: 1.1987
Epoch 22/30
15/15 ─────────────────── 40s 3s/step - accuracy: 0.9737 - loss: 0.1153 - val_accuracy: 0.7000 -
val_loss: 1.3849
Epoch 23/30
15/15 ─────────────────── 39s 3s/step - accuracy: 0.9287 - loss: 0.1538 - val_accuracy: 0.7000 -
val_loss: 1.3256
Epoch 24/30
15/15 ─────────────────── 38s 3s/step - accuracy: 0.9562 - loss: 0.1270 - val_accuracy: 0.7500 -
val_loss: 1.4763
Epoch 25/30
15/15 ─────────────────── 40s 3s/step - accuracy: 0.9767 - loss: 0.1115 - val_accuracy: 0.7000 -
val_loss: 1.3663
Epoch 26/30
15/15 ─────────────────── 40s 3s/step - accuracy: 0.9624 - loss: 0.1079 - val_accuracy: 0.6000 -
val_loss: 1.6125
Epoch 27/30
15/15 ─────────────────── 40s 3s/step - accuracy: 0.9564 - loss: 0.1134 - val_accuracy: 0.7000 -
val_loss: 2.1187
Epoch 28/30
15/15 ─────────────────── 40s 3s/step - accuracy: 0.9880 - loss: 0.0793 - val_accuracy: 0.7000 -
val_loss: 1.7566
Epoch 29/30
15/15 ─────────────────── 39s 3s/step - accuracy: 0.9481 - loss: 0.1160 - val_accuracy: 0.7500 -
val_loss: 1.5133
Epoch 30/30
15/15 ─────────────────── 40s 3s/step - accuracy: 0.9805 - loss: 0.0754 - val_accuracy: 0.7000 -
val_loss: 2.1932
```

IPython Console   History