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Epoch 1/200
35/35 [=====] - 11s 248ms/step - loss: 0.6947 - accuracy: 0.5141 - val_loss: 0.6889 - val_accuracy: 0.5000
Epoch 2/200
35/35 [=====] - 8s 228ms/step - loss: 0.6870 - accuracy: 0.5563 - val_loss: 0.6815 - val_accuracy: 0.6564
Epoch 3/200
35/35 [=====] - 8s 232ms/step - loss: 0.6818 - accuracy: 0.5767 - val_loss: 0.6713 - val_accuracy: 0.7327
Epoch 4/200
35/35 [=====] - 8s 231ms/step - loss: 0.6729 - accuracy: 0.6521 - val_loss: 0.6629 - val_accuracy: 0.7091
Epoch 5/200
35/35 [=====] - 8s 230ms/step - loss: 0.6630 - accuracy: 0.6798 - val_loss: 0.6524 - val_accuracy: 0.7418
Epoch 6/200
35/35 [=====] - 8s 228ms/step - loss: 0.6562 - accuracy: 0.6689 - val_loss: 0.6417 - val_accuracy: 0.7091
Epoch 7/200
35/35 [=====] - 8s 232ms/step - loss: 0.6455 - accuracy: 0.7016 - val_loss: 0.6281 - val_accuracy: 0.7673
Epoch 8/200
35/35 [=====] - 8s 231ms/step - loss: 0.6354 - accuracy: 0.7212 - val_loss: 0.6140 - val_accuracy: 0.8255
Epoch 9/200
35/35 [=====] - 8s 234ms/step - loss: 0.6255 - accuracy: 0.7262 - val_loss: 0.6013 - val_accuracy: 0.8236
Epoch 10/200
35/35 [=====] - 8s 232ms/step - loss: 0.6133 - accuracy: 0.7366 - val_loss: 0.5894 - val_accuracy: 0.8182
Epoch 11/200
35/35 [=====] - 8s 232ms/step - loss: 0.6052 - accuracy: 0.7343 - val_loss: 0.5793 - val_accuracy: 0.7873
Epoch 12/200
35/35 [=====] - 8s 228ms/step - loss: 0.5994 - accuracy: 0.7302 - val_loss: 0.5661 - val_accuracy: 0.8327
Epoch 13/200
35/35 [=====] - 8s 229ms/step - loss: 0.5893 - accuracy: 0.7275 - val_loss: 0.5597 - val_accuracy: 0.7982
Epoch 14/200
35/35 [=====] - 8s 233ms/step - loss: 0.5790 - accuracy: 0.7493 - val_loss: 0.5493 - val_accuracy: 0.8145
Epoch 15/200
35/35 [=====] - 8s 233ms/step - loss: 0.5722 - accuracy: 0.7493 - val_loss: 0.5447 - val_accuracy: 0.7945
Epoch 16/200
35/35 [=====] - 8s 231ms/step - loss: 0.5679 - accuracy: 0.7312 - val_loss: 0.5433 - val_accuracy: 0.7764
Epoch 17/200
35/35 [=====] - 8s 229ms/step - loss: 0.5606 - accuracy: 0.7548 - val_loss: 0.5292 - val_accuracy: 0.8091
Epoch 18/200
35/35 [=====] - 8s 232ms/step - loss: 0.5557 - accuracy: 0.7548 - val_loss: 0.5231 - val_accuracy: 0.8127
Epoch 19/200
35/35 [=====] - 8s 229ms/step - loss: 0.5480 - accuracy: 0.7629 - val_loss: 0.5178 - val_accuracy: 0.8091
Epoch 20/200
35/35 [=====] - 8s 230ms/step - loss: 0.5427 - accuracy: 0.7611 - val_loss: 0.5115 - val_accuracy: 0.8127
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Epoch 21/200
35/35 [=====] - 8s 230ms/step - loss: 0.5411 - accuracy: 0.7639 - val_loss: 0.5025 - val_accuracy: 0.8364
Epoch 22/200
35/35 [=====] - 8s 233ms/step - loss: 0.5324 - accuracy: 0.7702 - val_loss: 0.4979 - val_accuracy: 0.8291
Epoch 23/200
35/35 [=====] - 8s 229ms/step - loss: 0.5283 - accuracy: 0.7675 - val_loss: 0.4984 - val_accuracy: 0.8200
Epoch 24/200
35/35 [=====] - 8s 230ms/step - loss: 0.5254 - accuracy: 0.7711 - val_loss: 0.4874 - val_accuracy: 0.8327
Epoch 25/200
35/35 [=====] - 8s 232ms/step - loss: 0.5167 - accuracy: 0.7725 - val_loss: 0.4847 - val_accuracy: 0.8273
Epoch 26/200
35/35 [=====] - 8s 229ms/step - loss: 0.5183 - accuracy: 0.7720 - val_loss: 0.4782 - val_accuracy: 0.8473
Epoch 27/200
35/35 [=====] - 8s 229ms/step - loss: 0.5107 - accuracy: 0.7802 - val_loss: 0.4779 - val_accuracy: 0.8291
Epoch 28/200
35/35 [=====] - 8s 230ms/step - loss: 0.5063 - accuracy: 0.7779 - val_loss: 0.4703 - val_accuracy: 0.8473
Epoch 29/200
35/35 [=====] - 8s 230ms/step - loss: 0.5059 - accuracy: 0.7766 - val_loss: 0.4661 - val_accuracy: 0.8418
Epoch 30/200
35/35 [=====] - 8s 226ms/step - loss: 0.5018 - accuracy: 0.7897 - val_loss: 0.4644 - val_accuracy: 0.8382
Epoch 31/200
35/35 [=====] - 8s 231ms/step - loss: 0.5027 - accuracy: 0.7738 - val_loss: 0.4610 - val_accuracy: 0.8418
Epoch 32/200
35/35 [=====] - 8s 227ms/step - loss: 0.4917 - accuracy: 0.7897 - val_loss: 0.4564 - val_accuracy: 0.8491
Epoch 33/200
35/35 [=====] - 8s 236ms/step - loss: 0.4981 - accuracy: 0.7934 - val_loss: 0.4549 - val_accuracy: 0.8564
Epoch 34/200
35/35 [=====] - 8s 236ms/step - loss: 0.4904 - accuracy: 0.7920 - val_loss: 0.4515 - val_accuracy: 0.8418
Epoch 35/200
35/35 [=====] - 8s 228ms/step - loss: 0.4945 - accuracy: 0.7761 - val_loss: 0.4474 - val_accuracy: 0.8564
Epoch 36/200
35/35 [=====] - 8s 230ms/step - loss: 0.4858 - accuracy: 0.7952 - val_loss: 0.4444 - val_accuracy: 0.8527
Epoch 37/200
35/35 [=====] - 8s 228ms/step - loss: 0.4834 - accuracy: 0.7943 - val_loss: 0.4420 - val_accuracy: 0.8527
Epoch 38/200
35/35 [=====] - 8s 230ms/step - loss: 0.4791 - accuracy: 0.7993 - val_loss: 0.4400 - val_accuracy: 0.8509
Epoch 39/200
35/35 [=====] - 8s 226ms/step - loss: 0.4812 - accuracy: 0.7911 - val_loss: 0.4370 - val_accuracy: 0.8564
Epoch 40/200
35/35 [=====] - 8s 229ms/step - loss: 0.4754 - accuracy: 0.7929 - val_loss: 0.4341 - val_accuracy: 0.8636
Epoch 41/200
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35/35 [=====] - 8s 227ms/step - loss: 0.4734 - accuracy: 0.7961 - val_loss: 0.4318 - val_accuracy: 0.8618
Epoch 42/200
35/35 [=====] - 8s 226ms/step - loss: 0.4693 - accuracy: 0.8006 - val_loss: 0.4303 - val_accuracy: 0.8600
Epoch 43/200
35/35 [=====] - 8s 225ms/step - loss: 0.4712 - accuracy: 0.7984 - val_loss: 0.4282 - val_accuracy: 0.8582
Epoch 44/200
35/35 [=====] - 8s 234ms/step - loss: 0.4649 - accuracy: 0.8052 - val_loss: 0.4268 - val_accuracy: 0.8582
Epoch 45/200
35/35 [=====] - 8s 226ms/step - loss: 0.4676 - accuracy: 0.7997 - val_loss: 0.4238 - val_accuracy: 0.8600
Epoch 46/200
35/35 [=====] - 8s 226ms/step - loss: 0.4618 - accuracy: 0.8097 - val_loss: 0.4209 - val_accuracy: 0.8673
Epoch 47/200
35/35 [=====] - 8s 226ms/step - loss: 0.4601 - accuracy: 0.8097 - val_loss: 0.4215 - val_accuracy: 0.8545
Epoch 48/200
35/35 [=====] - 8s 234ms/step - loss: 0.4584 - accuracy: 0.8034 - val_loss: 0.4174 - val_accuracy: 0.8691
Epoch 49/200
35/35 [=====] - 8s 224ms/step - loss: 0.4538 - accuracy: 0.8052 - val_loss: 0.4158 - val_accuracy: 0.8600
Epoch 50/200
35/35 [=====] - 8s 226ms/step - loss: 0.4578 - accuracy: 0.7984 - val_loss: 0.4231 - val_accuracy: 0.8418
Epoch 51/200
35/35 [=====] - 8s 231ms/step - loss: 0.4534 - accuracy: 0.8097 - val_loss: 0.4129 - val_accuracy: 0.8600
Epoch 52/200
35/35 [=====] - 8s 229ms/step - loss: 0.4489 - accuracy: 0.8115 - val_loss: 0.4147 - val_accuracy: 0.8582
Epoch 53/200
35/35 [=====] - 8s 225ms/step - loss: 0.4482 - accuracy: 0.8129 - val_loss: 0.4100 - val_accuracy: 0.8582
Epoch 54/200
35/35 [=====] - 8s 225ms/step - loss: 0.4470 - accuracy: 0.8102 - val_loss: 0.4085 - val_accuracy: 0.8709
Epoch 55/200
35/35 [=====] - 8s 228ms/step - loss: 0.4436 - accuracy: 0.8179 - val_loss: 0.4085 - val_accuracy: 0.8509
Epoch 56/200
35/35 [=====] - 8s 227ms/step - loss: 0.4402 - accuracy: 0.8097 - val_loss: 0.4081 - val_accuracy: 0.8436
Epoch 57/200
35/35 [=====] - 8s 226ms/step - loss: 0.4399 - accuracy: 0.8138 - val_loss: 0.4057 - val_accuracy: 0.8491
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Epoch 58/200
35/35 [=====] - 8s 226ms/step - loss: 0.4403 - accu
racy: 0.8152 - val_loss: 0.4032 - val_accuracy: 0.8582
Epoch 59/200
35/35 [=====] - 8s 227ms/step - loss: 0.4332 - accu
racy: 0.8161 - val_loss: 0.4030 - val_accuracy: 0.8509
Epoch 60/200
35/35 [=====] - 8s 231ms/step - loss: 0.4376 - accu
racy: 0.8152 - val_loss: 0.4011 - val_accuracy: 0.8618
Epoch 61/200
35/35 [=====] - 8s 225ms/step - loss: 0.4327 - accu
racy: 0.8188 - val_loss: 0.3999 - val_accuracy: 0.8618
Epoch 62/200
35/35 [=====] - 8s 227ms/step - loss: 0.4359 - accu
racy: 0.8179 - val_loss: 0.3989 - val_accuracy: 0.8673
Epoch 63/200
35/35 [=====] - 8s 226ms/step - loss: 0.4407 - accu
racy: 0.8211 - val_loss: 0.3987 - val_accuracy: 0.8727
Epoch 64/200
35/35 [=====] - 8s 229ms/step - loss: 0.4316 - accu
racy: 0.8265 - val_loss: 0.3965 - val_accuracy: 0.8709
Epoch 65/200
35/35 [=====] - 8s 225ms/step - loss: 0.4307 - accu
racy: 0.8229 - val_loss: 0.3953 - val_accuracy: 0.8709
Epoch 66/200
35/35 [=====] - 8s 226ms/step - loss: 0.4301 - accu
racy: 0.8170 - val_loss: 0.3948 - val_accuracy: 0.8709
Epoch 67/200
35/35 [=====] - 8s 227ms/step - loss: 0.4272 - accu
racy: 0.8179 - val_loss: 0.3936 - val_accuracy: 0.8691
Epoch 68/200
35/35 [=====] - 8s 231ms/step - loss: 0.4263 - accu
racy: 0.8256 - val_loss: 0.3960 - val_accuracy: 0.8473
Epoch 69/200
35/35 [=====] - 8s 229ms/step - loss: 0.4264 - accu
racy: 0.8297 - val_loss: 0.3932 - val_accuracy: 0.8564
Epoch 70/200
35/35 [=====] - 8s 232ms/step - loss: 0.4255 - accu
racy: 0.8224 - val_loss: 0.3924 - val_accuracy: 0.8655
Epoch 71/200
35/35 [=====] - 8s 227ms/step - loss: 0.4199 - accu
racy: 0.8252 - val_loss: 0.3897 - val_accuracy: 0.8655
Epoch 72/200
35/35 [=====] - 8s 227ms/step - loss: 0.4217 - accu
racy: 0.8261 - val_loss: 0.3917 - val_accuracy: 0.8564
Epoch 73/200
35/35 [=====] - 8s 228ms/step - loss: 0.4189 - accu
racy: 0.8243 - val_loss: 0.3885 - val_accuracy: 0.8600
Epoch 74/200
35/35 [=====] - 8s 233ms/step - loss: 0.4180 - accu
racy: 0.8238 - val_loss: 0.3905 - val_accuracy: 0.8491
Epoch 75/200
35/35 [=====] - 8s 225ms/step - loss: 0.4145 - accu
racy: 0.8206 - val_loss: 0.3855 - val_accuracy: 0.8691
Epoch 76/200
35/35 [=====] - 8s 229ms/step - loss: 0.4121 - accu
racy: 0.8292 - val_loss: 0.3868 - val_accuracy: 0.8473
Epoch 77/200
35/35 [=====] - 8s 231ms/step - loss: 0.4181 - accu
racy: 0.8224 - val_loss: 0.3837 - val_accuracy: 0.8727
Epoch 78/200
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35/35 [=====] - 8s 225ms/step - loss: 0.4151 - accu
racy: 0.8297 - val_loss: 0.3833 - val_accuracy: 0.8709
Epoch 79/200
35/35 [=====] - 8s 228ms/step - loss: 0.4185 - accu
racy: 0.8256 - val_loss: 0.3834 - val_accuracy: 0.8655
Epoch 80/200
35/35 [=====] - 8s 226ms/step - loss: 0.4069 - accu
racy: 0.8338 - val_loss: 0.3806 - val_accuracy: 0.8709
Epoch 81/200
35/35 [=====] - 8s 229ms/step - loss: 0.4079 - accu
racy: 0.8324 - val_loss: 0.3791 - val_accuracy: 0.8709
Epoch 82/200
35/35 [=====] - 8s 228ms/step - loss: 0.4064 - accu
racy: 0.8347 - val_loss: 0.3787 - val_accuracy: 0.8709
Epoch 83/200
35/35 [=====] - 8s 227ms/step - loss: 0.4086 - accu
racy: 0.8283 - val_loss: 0.3810 - val_accuracy: 0.8618
Epoch 84/200
35/35 [=====] - 8s 232ms/step - loss: 0.4033 - accu
racy: 0.8365 - val_loss: 0.3766 - val_accuracy: 0.8709
Epoch 85/200
35/35 [=====] - 8s 235ms/step - loss: 0.4060 - accu
racy: 0.8338 - val_loss: 0.3769 - val_accuracy: 0.8636
Epoch 86/200
35/35 [=====] - 8s 227ms/step - loss: 0.4087 - accu
racy: 0.8252 - val_loss: 0.3783 - val_accuracy: 0.8655
Epoch 87/200
35/35 [=====] - 8s 227ms/step - loss: 0.3993 - accu
racy: 0.8347 - val_loss: 0.3746 - val_accuracy: 0.8764
Epoch 88/200
35/35 [=====] - 8s 226ms/step - loss: 0.4013 - accu
racy: 0.8320 - val_loss: 0.3911 - val_accuracy: 0.8109
Epoch 89/200
35/35 [=====] - 8s 228ms/step - loss: 0.4036 - accu
racy: 0.8383 - val_loss: 0.3723 - val_accuracy: 0.8727
Epoch 90/200
35/35 [=====] - 8s 225ms/step - loss: 0.4048 - accu
racy: 0.8351 - val_loss: 0.3786 - val_accuracy: 0.8527
Epoch 91/200
35/35 [=====] - 8s 225ms/step - loss: 0.4023 - accu
racy: 0.8338 - val_loss: 0.3714 - val_accuracy: 0.8764
Epoch 92/200
35/35 [=====] - 8s 231ms/step - loss: 0.3997 - accu
racy: 0.8433 - val_loss: 0.3701 - val_accuracy: 0.8764
Epoch 93/200
35/35 [=====] - 8s 230ms/step - loss: 0.3984 - accu
racy: 0.8379 - val_loss: 0.3704 - val_accuracy: 0.8727
Epoch 94/200
35/35 [=====] - 8s 228ms/step - loss: 0.3955 - accu
racy: 0.8424 - val_loss: 0.3678 - val_accuracy: 0.8727
Epoch 95/200
35/35 [=====] - 8s 228ms/step - loss: 0.3950 - accu
racy: 0.8347 - val_loss: 0.3693 - val_accuracy: 0.8727
Epoch 96/200
35/35 [=====] - 8s 230ms/step - loss: 0.3979 - accu
racy: 0.8374 - val_loss: 0.3687 - val_accuracy: 0.8727
Epoch 97/200
35/35 [=====] - 8s 226ms/step - loss: 0.3924 - accu
racy: 0.8411 - val_loss: 0.3697 - val_accuracy: 0.8618
Epoch 98/200
35/35 [=====] - 8s 227ms/step - loss: 0.3960 - accu
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racy: 0.8392 - val_loss: 0.3674 - val_accuracy: 0.8727
Epoch 99/200
35/35 [=====] - 8s 226ms/step - loss: 0.3923 - accu
racy: 0.8379 - val_loss: 0.3688 - val_accuracy: 0.8582
Epoch 100/200
35/35 [=====] - 8s 229ms/step - loss: 0.3953 - accu
racy: 0.8356 - val_loss: 0.3668 - val_accuracy: 0.8745
Epoch 101/200
35/35 [=====] - 8s 224ms/step - loss: 0.3880 - accu
racy: 0.8488 - val_loss: 0.3627 - val_accuracy: 0.8745
Epoch 102/200
35/35 [=====] - 8s 228ms/step - loss: 0.3885 - accu
racy: 0.8488 - val_loss: 0.3641 - val_accuracy: 0.8727
Epoch 103/200
35/35 [=====] - 8s 225ms/step - loss: 0.3865 - accu
racy: 0.8470 - val_loss: 0.3626 - val_accuracy: 0.8745
Epoch 104/200
35/35 [=====] - 8s 226ms/step - loss: 0.3880 - accu
racy: 0.8388 - val_loss: 0.3660 - val_accuracy: 0.8600
Epoch 105/200
35/35 [=====] - 8s 228ms/step - loss: 0.3853 - accu
racy: 0.8442 - val_loss: 0.3615 - val_accuracy: 0.8764
Epoch 106/200
35/35 [=====] - 8s 226ms/step - loss: 0.3852 - accu
racy: 0.8424 - val_loss: 0.3597 - val_accuracy: 0.8764
Epoch 107/200
35/35 [=====] - 8s 227ms/step - loss: 0.3897 - accu
racy: 0.8388 - val_loss: 0.3633 - val_accuracy: 0.8655
Epoch 108/200
35/35 [=====] - 8s 226ms/step - loss: 0.3837 - accu
racy: 0.8438 - val_loss: 0.3617 - val_accuracy: 0.8691
Epoch 109/200
35/35 [=====] - 8s 226ms/step - loss: 0.3836 - accu
racy: 0.8510 - val_loss: 0.3588 - val_accuracy: 0.8727
Epoch 110/200
35/35 [=====] - 8s 229ms/step - loss: 0.3817 - accu
racy: 0.8501 - val_loss: 0.3571 - val_accuracy: 0.8727
Epoch 111/200
35/35 [=====] - 8s 240ms/step - loss: 0.3835 - accu
racy: 0.8451 - val_loss: 0.3589 - val_accuracy: 0.8745
Epoch 112/200
35/35 [=====] - 8s 226ms/step - loss: 0.3808 - accu
racy: 0.8447 - val_loss: 0.3564 - val_accuracy: 0.8764
Epoch 113/200
35/35 [=====] - 8s 226ms/step - loss: 0.3831 - accu
racy: 0.8506 - val_loss: 0.3631 - val_accuracy: 0.8545
Epoch 114/200
35/35 [=====] - 8s 225ms/step - loss: 0.3784 - accu
racy: 0.8515 - val_loss: 0.3537 - val_accuracy: 0.8745
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Epoch 115/200
35/35 [=====] - 8s 227ms/step - loss: 0.3770 - accu
racy: 0.8447 - val_loss: 0.3647 - val_accuracy: 0.8382
Epoch 116/200
35/35 [=====] - 8s 227ms/step - loss: 0.3780 - accu
racy: 0.8488 - val_loss: 0.3536 - val_accuracy: 0.8745
Epoch 117/200
35/35 [=====] - 8s 228ms/step - loss: 0.3692 - accu
racy: 0.8629 - val_loss: 0.3518 - val_accuracy: 0.8709
Epoch 118/200
35/35 [=====] - 8s 229ms/step - loss: 0.3762 - accu
racy: 0.8438 - val_loss: 0.3675 - val_accuracy: 0.8273
Epoch 119/200
35/35 [=====] - 8s 228ms/step - loss: 0.3754 - accu
racy: 0.8420 - val_loss: 0.3510 - val_accuracy: 0.8764
Epoch 120/200
35/35 [=====] - 8s 226ms/step - loss: 0.3718 - accu
racy: 0.8497 - val_loss: 0.3524 - val_accuracy: 0.8727
Epoch 121/200
35/35 [=====] - 8s 227ms/step - loss: 0.3688 - accu
racy: 0.8551 - val_loss: 0.3580 - val_accuracy: 0.8473
Epoch 122/200
35/35 [=====] - 8s 228ms/step - loss: 0.3677 - accu
racy: 0.8606 - val_loss: 0.3486 - val_accuracy: 0.8709
Epoch 123/200
35/35 [=====] - 8s 227ms/step - loss: 0.3725 - accu
racy: 0.8483 - val_loss: 0.3599 - val_accuracy: 0.8418
Epoch 124/200
35/35 [=====] - 8s 229ms/step - loss: 0.3715 - accu
racy: 0.8474 - val_loss: 0.3504 - val_accuracy: 0.8709
Epoch 125/200
35/35 [=====] - 8s 228ms/step - loss: 0.3673 - accu
racy: 0.8510 - val_loss: 0.3469 - val_accuracy: 0.8691
Epoch 126/200
35/35 [=====] - 8s 228ms/step - loss: 0.3623 - accu
racy: 0.8565 - val_loss: 0.3456 - val_accuracy: 0.8745
Epoch 127/200
35/35 [=====] - 8s 226ms/step - loss: 0.3648 - accu
racy: 0.8574 - val_loss: 0.3454 - val_accuracy: 0.8764
Epoch 128/200
35/35 [=====] - 8s 225ms/step - loss: 0.3581 - accu
racy: 0.8488 - val_loss: 0.3479 - val_accuracy: 0.8709
Epoch 129/200
35/35 [=====] - 8s 225ms/step - loss: 0.3680 - accu
racy: 0.8606 - val_loss: 0.3452 - val_accuracy: 0.8691
Epoch 130/200
35/35 [=====] - 8s 230ms/step - loss: 0.3614 - accu
racy: 0.8574 - val_loss: 0.3474 - val_accuracy: 0.8691
Epoch 131/200
35/35 [=====] - 8s 226ms/step - loss: 0.3628 - accu
racy: 0.8529 - val_loss: 0.3438 - val_accuracy: 0.8709
Epoch 132/200
35/35 [=====] - 8s 227ms/step - loss: 0.3682 - accu
racy: 0.8479 - val_loss: 0.3440 - val_accuracy: 0.8727
Epoch 133/200
35/35 [=====] - 8s 230ms/step - loss: 0.3652 - accu
racy: 0.8515 - val_loss: 0.3428 - val_accuracy: 0.8727
Epoch 134/200
35/35 [=====] - 8s 226ms/step - loss: 0.3608 - accu
racy: 0.8560 - val_loss: 0.3483 - val_accuracy: 0.8527
Epoch 135/200
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35/35 [=====] - 8s 226ms/step - loss: 0.3548 - accu
racy: 0.8615 - val_loss: 0.3411 - val_accuracy: 0.8709
Epoch 136/200
35/35 [=====] - 8s 226ms/step - loss: 0.3568 - accu
racy: 0.8583 - val_loss: 0.3422 - val_accuracy: 0.8709
Epoch 137/200
35/35 [=====] - 8s 230ms/step - loss: 0.3552 - accu
racy: 0.8692 - val_loss: 0.3414 - val_accuracy: 0.8709
Epoch 138/200
35/35 [=====] - 8s 225ms/step - loss: 0.3599 - accu
racy: 0.8592 - val_loss: 0.3475 - val_accuracy: 0.8491
Epoch 139/200
35/35 [=====] - 8s 225ms/step - loss: 0.3579 - accu
racy: 0.8606 - val_loss: 0.3453 - val_accuracy: 0.8582
Epoch 140/200
35/35 [=====] - 8s 226ms/step - loss: 0.3519 - accu
racy: 0.8574 - val_loss: 0.3385 - val_accuracy: 0.8709
Epoch 141/200
35/35 [=====] - 8s 233ms/step - loss: 0.3547 - accu
racy: 0.8619 - val_loss: 0.3458 - val_accuracy: 0.8491
Epoch 142/200
35/35 [=====] - 8s 229ms/step - loss: 0.3536 - accu
racy: 0.8638 - val_loss: 0.3377 - val_accuracy: 0.8745
Epoch 143/200
35/35 [=====] - 8s 225ms/step - loss: 0.3498 - accu
racy: 0.8638 - val_loss: 0.3386 - val_accuracy: 0.8673
Epoch 144/200
35/35 [=====] - 8s 225ms/step - loss: 0.3506 - accu
racy: 0.8642 - val_loss: 0.3414 - val_accuracy: 0.8564
Epoch 145/200
35/35 [=====] - 8s 230ms/step - loss: 0.3580 - accu
racy: 0.8551 - val_loss: 0.3363 - val_accuracy: 0.8727
Epoch 146/200
35/35 [=====] - 8s 226ms/step - loss: 0.3479 - accu
racy: 0.8588 - val_loss: 0.3366 - val_accuracy: 0.8727
Epoch 147/200
35/35 [=====] - 8s 226ms/step - loss: 0.3467 - accu
racy: 0.8610 - val_loss: 0.3381 - val_accuracy: 0.8655
Epoch 148/200
35/35 [=====] - 8s 229ms/step - loss: 0.3509 - accu
racy: 0.8556 - val_loss: 0.3405 - val_accuracy: 0.8618
Epoch 149/200
35/35 [=====] - 8s 225ms/step - loss: 0.3491 - accu
racy: 0.8697 - val_loss: 0.3436 - val_accuracy: 0.8400
Epoch 150/200
35/35 [=====] - 8s 225ms/step - loss: 0.3471 - accu
racy: 0.8647 - val_loss: 0.3353 - val_accuracy: 0.8655
Epoch 151/200
35/35 [=====] - 8s 226ms/step - loss: 0.3479 - accu
racy: 0.8665 - val_loss: 0.3400 - val_accuracy: 0.8582
Epoch 152/200
35/35 [=====] - 8s 234ms/step - loss: 0.3396 - accu
racy: 0.8633 - val_loss: 0.3361 - val_accuracy: 0.8618
Epoch 153/200
35/35 [=====] - 8s 227ms/step - loss: 0.3461 - accu
racy: 0.8633 - val_loss: 0.3357 - val_accuracy: 0.8655
Epoch 154/200
35/35 [=====] - 8s 228ms/step - loss: 0.3430 - accu
racy: 0.8719 - val_loss: 0.3361 - val_accuracy: 0.8618
Epoch 155/200
35/35 [=====] - 8s 224ms/step - loss: 0.3411 - accu
```



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racy: 0.8742 - val_loss: 0.3384 - val_accuracy: 0.8545
Epoch 156/200
35/35 [=====] - 8s 226ms/step - loss: 0.3428 - accu
racy: 0.8642 - val_loss: 0.3312 - val_accuracy: 0.8691
Epoch 157/200
35/35 [=====] - 8s 227ms/step - loss: 0.3386 - accu
racy: 0.8742 - val_loss: 0.3391 - val_accuracy: 0.8491
Epoch 158/200
35/35 [=====] - 8s 226ms/step - loss: 0.3408 - accu
racy: 0.8660 - val_loss: 0.3383 - val_accuracy: 0.8564
Epoch 159/200
35/35 [=====] - 8s 227ms/step - loss: 0.3401 - accu
racy: 0.8669 - val_loss: 0.3289 - val_accuracy: 0.8709
Epoch 160/200
35/35 [=====] - 8s 229ms/step - loss: 0.3332 - accu
racy: 0.8715 - val_loss: 0.3334 - val_accuracy: 0.8600
Epoch 161/200
35/35 [=====] - 8s 233ms/step - loss: 0.3335 - accu
racy: 0.8688 - val_loss: 0.3284 - val_accuracy: 0.8673
Epoch 162/200
35/35 [=====] - 8s 235ms/step - loss: 0.3391 - accu
racy: 0.8692 - val_loss: 0.3311 - val_accuracy: 0.8655
Epoch 163/200
35/35 [=====] - 8s 240ms/step - loss: 0.3325 - accu
racy: 0.8647 - val_loss: 0.3279 - val_accuracy: 0.8673
Epoch 164/200
35/35 [=====] - 8s 238ms/step - loss: 0.3359 - accu
racy: 0.8733 - val_loss: 0.3297 - val_accuracy: 0.8636
Epoch 165/200
35/35 [=====] - 8s 242ms/step - loss: 0.3247 - accu
racy: 0.8738 - val_loss: 0.3281 - val_accuracy: 0.8636
Epoch 166/200
35/35 [=====] - 8s 233ms/step - loss: 0.3349 - accu
racy: 0.8669 - val_loss: 0.3268 - val_accuracy: 0.8691
Epoch 167/200
35/35 [=====] - 8s 242ms/step - loss: 0.3386 - accu
racy: 0.8678 - val_loss: 0.3384 - val_accuracy: 0.8509
Epoch 168/200
35/35 [=====] - 8s 229ms/step - loss: 0.3278 - accu
racy: 0.8706 - val_loss: 0.3276 - val_accuracy: 0.8636
Epoch 169/200
35/35 [=====] - 8s 234ms/step - loss: 0.3291 - accu
racy: 0.8724 - val_loss: 0.3285 - val_accuracy: 0.8600
Epoch 170/200
35/35 [=====] - 8s 229ms/step - loss: 0.3328 - accu
racy: 0.8701 - val_loss: 0.3366 - val_accuracy: 0.8491
Epoch 171/200
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35/35 [=====] - 8s 235ms/step - loss: 0.3306 - accu
racy: 0.8692 - val_loss: 0.3324 - val_accuracy: 0.8545
Epoch 172/200
35/35 [=====] - 8s 235ms/step - loss: 0.3268 - accu
racy: 0.8678 - val_loss: 0.3287 - val_accuracy: 0.8582
Epoch 173/200
35/35 [=====] - 8s 233ms/step - loss: 0.3318 - accu
racy: 0.8697 - val_loss: 0.3252 - val_accuracy: 0.8618
Epoch 174/200
35/35 [=====] - 8s 232ms/step - loss: 0.3256 - accu
racy: 0.8742 - val_loss: 0.3251 - val_accuracy: 0.8618
Epoch 175/200
35/35 [=====] - 8s 232ms/step - loss: 0.3223 - accu
racy: 0.8797 - val_loss: 0.3288 - val_accuracy: 0.8582
Epoch 176/200
35/35 [=====] - 8s 238ms/step - loss: 0.3248 - accu
racy: 0.8738 - val_loss: 0.3293 - val_accuracy: 0.8600
Epoch 177/200
35/35 [=====] - 8s 235ms/step - loss: 0.3270 - accu
racy: 0.8756 - val_loss: 0.3237 - val_accuracy: 0.8618
Epoch 178/200
35/35 [=====] - 8s 242ms/step - loss: 0.3289 - accu
racy: 0.8751 - val_loss: 0.3238 - val_accuracy: 0.8618
Epoch 179/200
35/35 [=====] - 8s 238ms/step - loss: 0.3265 - accu
racy: 0.8697 - val_loss: 0.3328 - val_accuracy: 0.8527
Epoch 180/200
35/35 [=====] - 8s 242ms/step - loss: 0.3202 - accu
racy: 0.8837 - val_loss: 0.3267 - val_accuracy: 0.8600
Epoch 181/200
35/35 [=====] - 9s 245ms/step - loss: 0.3188 - accu
racy: 0.8810 - val_loss: 0.3328 - val_accuracy: 0.8491
Epoch 182/200
35/35 [=====] - 9s 244ms/step - loss: 0.3252 - accu
racy: 0.8787 - val_loss: 0.3235 - val_accuracy: 0.8618
Epoch 183/200
35/35 [=====] - 9s 244ms/step - loss: 0.3200 - accu
racy: 0.8787 - val_loss: 0.3308 - val_accuracy: 0.8564
Epoch 184/200
35/35 [=====] - 9s 262ms/step - loss: 0.3175 - accu
racy: 0.8797 - val_loss: 0.3272 - val_accuracy: 0.8582
Epoch 185/200
35/35 [=====] - 9s 271ms/step - loss: 0.3139 - accu
racy: 0.8801 - val_loss: 0.3287 - val_accuracy: 0.8545
Epoch 186/200
35/35 [=====] - 9s 252ms/step - loss: 0.3202 - accu
racy: 0.8806 - val_loss: 0.3243 - val_accuracy: 0.8636
Epoch 187/200
35/35 [=====] - 8s 238ms/step - loss: 0.3246 - accu
racy: 0.8710 - val_loss: 0.3286 - val_accuracy: 0.8564
Epoch 188/200
35/35 [=====] - 8s 240ms/step - loss: 0.3228 - accu
racy: 0.8833 - val_loss: 0.3226 - val_accuracy: 0.8636
Epoch 189/200
35/35 [=====] - 8s 237ms/step - loss: 0.3157 - accu
racy: 0.8778 - val_loss: 0.3250 - val_accuracy: 0.8582
Epoch 190/200
35/35 [=====] - 8s 234ms/step - loss: 0.3162 - accu
racy: 0.8742 - val_loss: 0.3482 - val_accuracy: 0.8164
Epoch 191/200
35/35 [=====] - 8s 242ms/step - loss: 0.3156 - accu
```

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racy: 0.8715 - val_loss: 0.3182 - val_accuracy: 0.8600
Epoch 192/200
35/35 [=====] - 9s 252ms/step - loss: 0.3187 - accu
racy: 0.8765 - val_loss: 0.3318 - val_accuracy: 0.8364
Epoch 193/200
35/35 [=====] - 8s 237ms/step - loss: 0.3130 - accu
racy: 0.8828 - val_loss: 0.3288 - val_accuracy: 0.8473
Epoch 194/200
35/35 [=====] - 9s 244ms/step - loss: 0.3156 - accu
racy: 0.8810 - val_loss: 0.3269 - val_accuracy: 0.8527
Epoch 195/200
35/35 [=====] - 9s 263ms/step - loss: 0.3070 - accu
racy: 0.8824 - val_loss: 0.3199 - val_accuracy: 0.8691
Epoch 196/200
35/35 [=====] - 8s 241ms/step - loss: 0.3158 - accu
racy: 0.8751 - val_loss: 0.3250 - val_accuracy: 0.8545
Epoch 197/200
35/35 [=====] - 8s 242ms/step - loss: 0.3142 - accu
racy: 0.8797 - val_loss: 0.3203 - val_accuracy: 0.8673
Epoch 198/200
35/35 [=====] - 8s 227ms/step - loss: 0.3104 - accu
racy: 0.8778 - val_loss: 0.3175 - val_accuracy: 0.8618
Epoch 199/200
35/35 [=====] - 8s 241ms/step - loss: 0.3053 - accu
racy: 0.8851 - val_loss: 0.3198 - val_accuracy: 0.8636
Epoch 200/200
35/35 [=====] - 8s 234ms/step - loss: 0.3156 - accu
racy: 0.8797 - val_loss: 0.3297 - val_accuracy: 0.8455
```