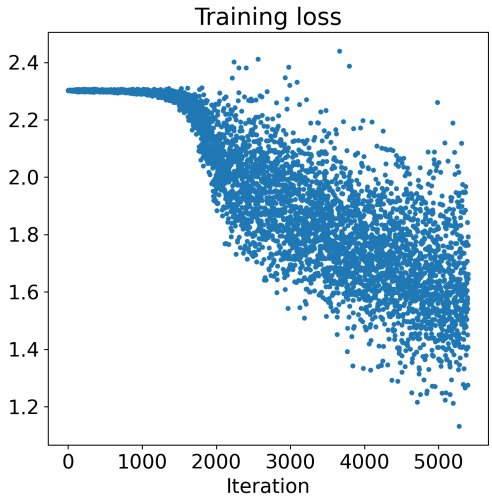
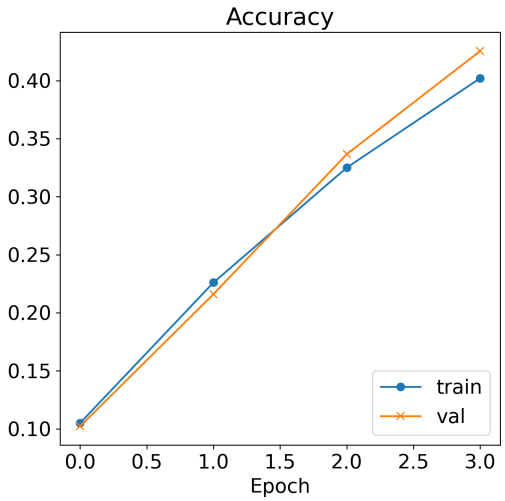
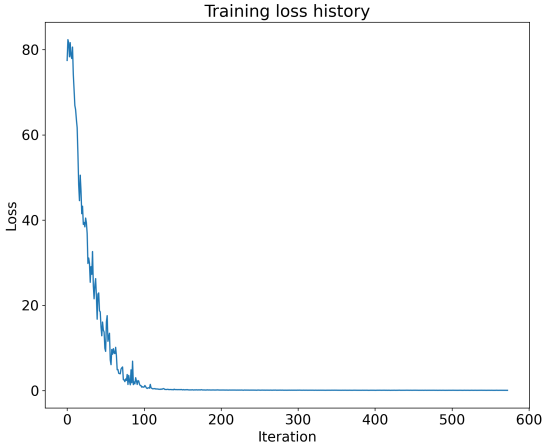
1 (c)

Test accuracy for CIFAR dataset: 42.08%

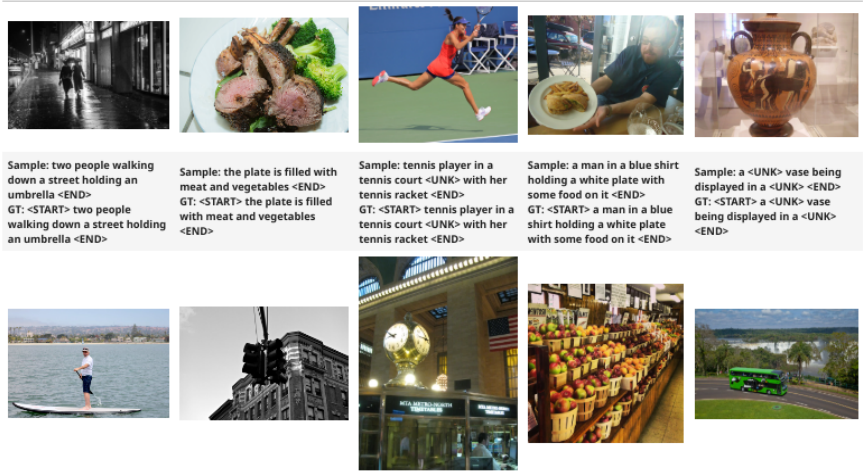




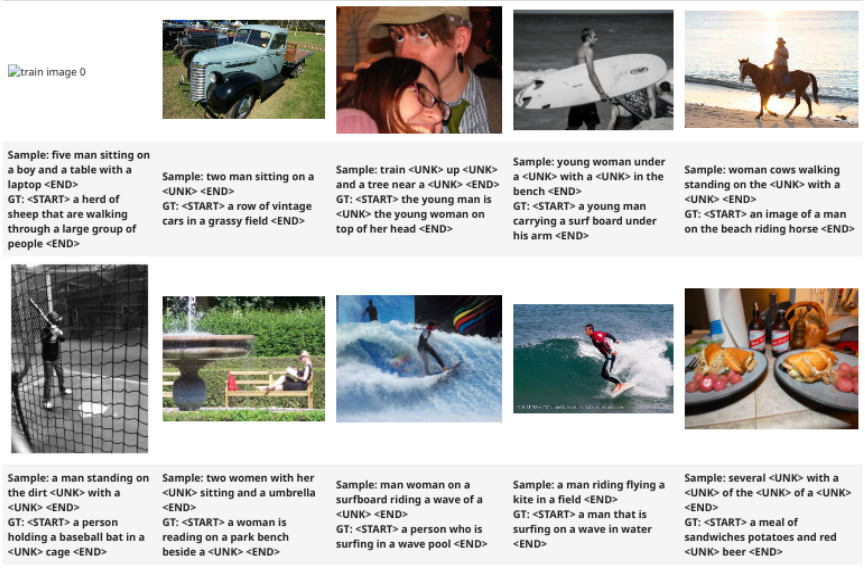
2 (c)



Training samples



Validation samples



textbf3 (b)

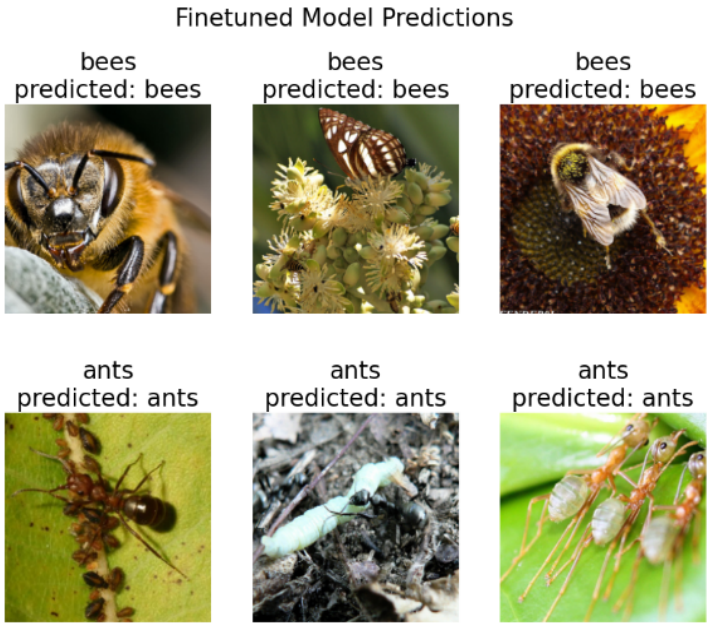
Fine-tuned pretrained model

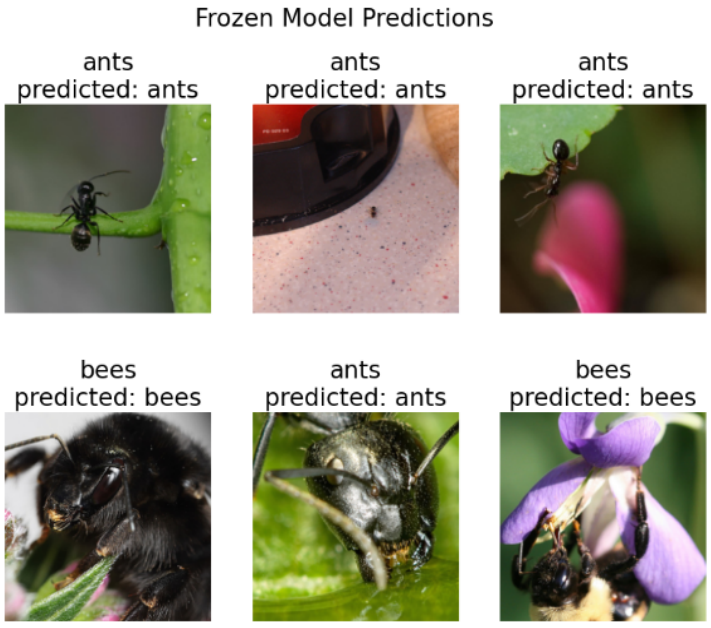
Training time	0m 0s
Best val Acc	0.712418
Epoch	0/4
train Loss	0.5000
Acc	0.7664
val Loss	0.3085
Acc	0.8758
Epoch	1/4
train Loss	0.5936
Acc	0.7254
val Loss	0.2439
Acc	0.9150
Epoch	2/4
train Loss	0.5174
Acc	0.7828
val Loss	0.3162
Acc	0.8824
Epoch	3/4
train Loss	0.5208
Acc	0.7705
val Loss	0.3700
Acc	0.8889
Epoch	4/4
train Loss	0.7435
Acc	0.7910
val Loss	0.3417
Acc	0.8562
Training time	0m 6s
Best val Acc	0.915033

Without finetuning

Training time	0m 0s
Best val Acc	0.457516
Epoch	0/4
train Loss	0.5814
Acc	0.7049
val Loss	0.2089
Acc	0.9346
Epoch	1/4
train Loss	0.4798
Acc	0.7910
val Loss	0.1932
Acc	0.9477
Epoch	2/4
train Loss	0.5531
Acc	0.7336
val Loss	0.6048
Acc	0.7647
Epoch	3/4
train Loss	0.6411
Acc	0.7418
val Loss	0.1941
Acc	0.9346
Epoch	4/4
train Loss	0.4340
Acc	0.8197
val Loss	0.2179
Acc	0.9281
Training time	0m 4s
Best val Acc	0.947712

3 (c)


Finetuned Model Predictions
bees
predicted: bees
bees
predicted: bees
bees
predicted: bees
ants
predicted: ants
ants
predicted: ants
ants
predicted: ants


Frozen Model Predictions
ants
predicted: ants
ants
predicted: ants
ants
predicted: ants
bees
predicted: bees
ants
predicted: ants
bees
predicted: bees