



strategy3을 보면 conv부분을 전부 freeze를 시키고 resnet의 classfiar 부분만 가져와서 training 시키는 것입니다.

1

```
Epoch 0/9
-----
train Loss: 0.5418 Acc: 0.7254
val Loss: 0.1730 Acc: 0.9477

Epoch 1/9
-----
train Loss: 0.3345 Acc: 0.8402
val Loss: 0.2105 Acc: 0.9281

Epoch 2/9
-----
train Loss: 0.6509 Acc: 0.7910
val Loss: 0.2764 Acc: 0.8824

Epoch 3/9
-----
train Loss: 0.4317 Acc: 0.8361
val Loss: 0.2131 Acc: 0.9020

Epoch 4/9
-----
train Loss: 0.6276 Acc: 0.7910
val Loss: 0.3824 Acc: 0.9020

Epoch 5/9
-----
train Loss: 0.4889 Acc: 0.8361
val Loss: 0.2918 Acc: 0.8954

Epoch 6/9
-----
train Loss: 0.4775 Acc: 0.8320
val Loss: 0.3779 Acc: 0.8758

Epoch 7/9
-----
train Loss: 0.4032 Acc: 0.8811
val Loss: 0.3027 Acc: 0.8889

Epoch 8/9
-----
train Loss: 0.4619 Acc: 0.8033
val Loss: 0.3072 Acc: 0.9085

Epoch 9/9
-----
train Loss: 0.2973 Acc: 0.8770
val Loss: 0.3113 Acc: 0.8954

Training complete in 4m 56s
Best val Acc: 0.947712
```

3

```
Epoch 0/9
-----
train Loss: 0.7299 Acc: 0.6107
val Loss: 0.1895 Acc: 0.9542

Epoch 1/9
-----
train Loss: 0.5013 Acc: 0.7623
val Loss: 0.2041 Acc: 0.9346

Epoch 2/9
-----
train Loss: 0.4500 Acc: 0.8197
val Loss: 0.2058 Acc: 0.9281

Epoch 3/9
-----
train Loss: 0.6378 Acc: 0.7254
val Loss: 0.2055 Acc: 0.9477

Epoch 4/9
-----
train Loss: 0.4060 Acc: 0.8320
val Loss: 0.2048 Acc: 0.9477

Epoch 5/9
-----
train Loss: 0.5136 Acc: 0.8033
val Loss: 0.2462 Acc: 0.9216

Epoch 6/9
-----
train Loss: 0.5768 Acc: 0.7869
val Loss: 0.2091 Acc: 0.9216

Epoch 7/9
-----
train Loss: 0.3785 Acc: 0.8279
val Loss: 0.1843 Acc: 0.9542

Epoch 8/9
-----
train Loss: 0.3181 Acc: 0.8525
val Loss: 0.1975 Acc: 0.9542

Epoch 9/9
-----
train Loss: 0.2815 Acc: 0.8443
val Loss: 0.1796 Acc: 0.9542

Training complete in 2m 20s
Best val Acc: 0.954248
```

epoch	본 인 네 트 워 크		stategy1		strategy3	
	vall loss	Acc	val loss	Acc	vall loss	Acc
1	0.1915	0.9020	0.1730	0.9477	0.1895	0.9542
2	0.3040	0.8693	0.2105	0.9281	0.2041	0.9346
3	0.4916	0.7974	0.2764	0.8824	0.2058	0.9281
4	0.1585	0.9412	0.2131	0.9020	0.2055	0.9477
5	0.2690	0.9216	0.3824	0.9020	0.2048	0.9477
6	0.3987	0.8497	0.2918	0.8954	0.2462	0.9216
7	0.2171	0.9477	0.3779	0.8758	0.2091	0.9216
8	0.2183	0.9281	0.3027	0.8889	0.1843	0.9542
9	0.2230	0.9346	0.3072	0.9085	0.1975	0.9542
10	0.2124	0.9412	0.3113	0.8954	0.1796	0.9542

strategy3이 정확도가 높게 나오는 것을 볼 수 있습니다.