Vision Transformer Results

Without Transfer learning

i). Training - 10 epochs

```
Output is truncated. View as a scrollable element or open in a text editor. Adjust cell output settings...
 90%|█████████ | 9/10 [1:01:49<06:25, 385.11s/it]
Epoch: 9 | train_loss: 1.3864 | train_acc: 0.2521 | test_loss: 1.3863 | test_acc: 0.2528
Image Shape:  torch.Size([32, 3, 224, 224])
Image Patch Shape:  torch.Size([32, 768, 14, 14])
Flattened Image:  torch.Size([32, 768, 196])
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Image Patch Shape:  torch.Size([23, 768, 14, 14])
Flattened Image:  torch.Size([23, 768, 196])
Output is truncated. View as a scrollable element or open in a text editor. Adjust cell output settings...
100%|██████████| 10/10 [1:07:25<00:00, 404.54s/it]
Epoch: 10 | train_loss: 1.3864 | train_acc: 0.2498 | test_loss: 1.3862 | test_acc: 0.2526
```
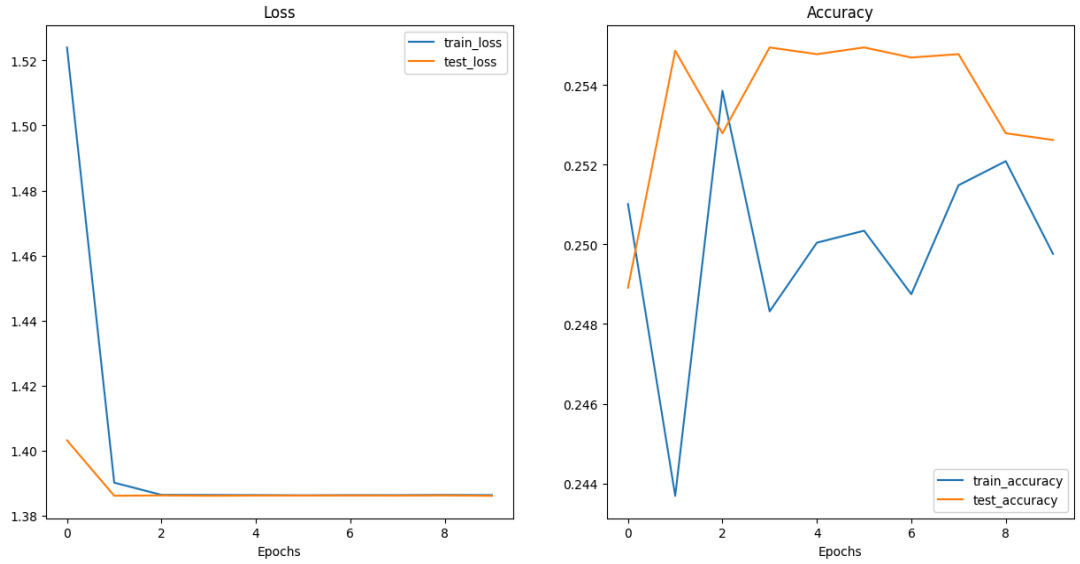

ii). Sample test image and its prediction

```
Image Shape:  torch.Size([1, 3, 224, 224])
Image Patch Shape:  torch.Size([1, 768, 14, 14])
Flattened Image:  torch.Size([1, 768, 196])
```

iii). Performance metrics



With Transfer Learning

i). Training - 10 epochs

```
 10%|          | 1/10 [03:12<28:56, 192.95s/it]
Epoch: 1 | train_loss: 0.8200 | train_acc: 0.6099 | test_loss: 0.6972 | test_acc: 0.6448
 20%|          | 2/10 [06:23<25:33, 191.74s/it]
Epoch: 2 | train_loss: 0.6507 | train_acc: 0.6841 | test_loss: 0.6623 | test_acc: 0.6645
 30%|          | 3/10 [09:34<22:18, 191.27s/it]
Epoch: 3 | train_loss: 0.6086 | train_acc: 0.7024 | test_loss: 0.6538 | test_acc: 0.6733
 40%|          | 4/10 [12:45<19:05, 190.95s/it]
Epoch: 4 | train_loss: 0.5780 | train_acc: 0.7197 | test_loss: 0.6793 | test_acc: 0.6567
 50%|          | 5/10 [15:54<15:52, 190.45s/it]
Epoch: 5 | train_loss: 0.5619 | train_acc: 0.7283 | test_loss: 0.6566 | test_acc: 0.6681
 60%|          | 6/10 [19:03<12:39, 189.84s/it]
Epoch: 6 | train_loss: 0.5572 | train_acc: 0.7281 | test_loss: 0.6550 | test_acc: 0.6766
 70%|          | 7/10 [22:10<09:27, 189.04s/it]
Epoch: 7 | train_loss: 0.5480 | train_acc: 0.7326 | test_loss: 0.6580 | test_acc: 0.6688
 80%|          | 8/10 [25:17<06:16, 188.28s/it]
Epoch: 8 | train_loss: 0.5356 | train_acc: 0.7369 | test_loss: 0.6615 | test_acc: 0.6722
 90%|          | 9/10 [28:22<03:07, 187.41s/it]
Epoch: 9 | train_loss: 0.5326 | train_acc: 0.7409 | test_loss: 0.6801 | test_acc: 0.6739
100%|          | 10/10 [31:27<00:00, 188.73s/it]
Epoch: 10 | train_loss: 0.5214 | train_acc: 0.7417 | test_loss: 0.6969 | test_acc: 0.6797
```

ii). Sample test image and its prediction

iii). Performance metrics