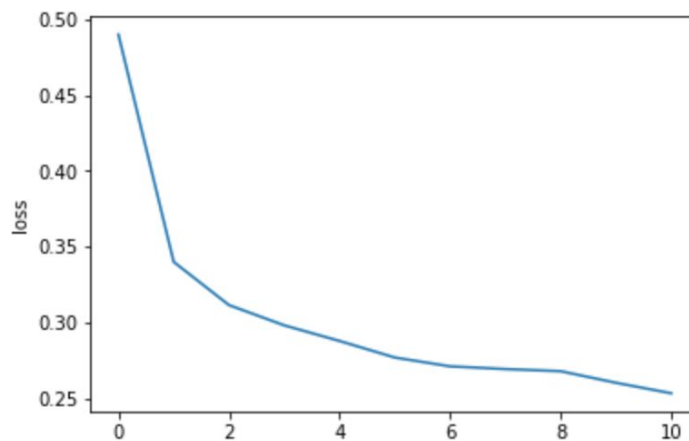


## Problem 1

With the submitted model, I was able to achieve an accuracy rate of 89.5% (hopefully this meets the 90% requirement lol). The hyperparameters I chose were as follows:

- Batch\_size = 128
- Num\_epoch = 11
- No adjustments made to optimizer
- Layers described below, in code
  - `self.fc1 = nn.Linear(28*28, 16)`
  - `self.fc2 = nn.Linear(16,10)`

Loss over epochs shown below.



Evidence of accuracy shown below.

```
Start training...
100%|██████████|
Epoch 1 loss:0.49023224161866
100%|██████████|
Epoch 2 loss:0.33996286378492
100%|██████████|
Epoch 3 loss:0.31142052638408
100%|██████████|
Epoch 4 loss:0.29802778824363
100%|██████████|
Epoch 5 loss:0.28770858510528
100%|██████████|
Epoch 6 loss:0.27675609574522
100%|██████████|
Epoch 7 loss:0.27093049779038
100%|██████████|
Epoch 8 loss:0.26913581815217
100%|██████████|
Epoch 9 loss:0.26773168138988
100%|██████████|
Epoch 10 loss:0.2600697096427
100%|██████████|
Epoch 11 loss:0.2531441690405
Done!
Evaluate on validation set...
100%|██████████|
Evaluation accuracy: 0.8946
Evaluate on test set
100%|██████████|
Evaluation accuracy: 0.8903
```