Lab Assignment 1- Sharvita.ipynb

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```
def main():
    '''
    This is an example of how to use the framework when completed. You can build off of this code to design your experiments for part 2.
    '''

    x_train, y_train, x_test, y_test = normalize_mnist()

    # Example: MLP with one hidden layer of size 256.
    model = MLP([784, 256, 10])
    model.initialize()
    model.set_hp(lr=1e-6, bs=512, activation=ReLU)

    E = 25  # number of epochs
    for epoch in range(E):
        #print(f"\nEpoch {epoch+1}/{E}")
        TrainMLP(model, x_train, y_train)
        #TestMLP(model, x_test, y_test)
        loss, accuracy = TestMLP(model, x_test, y_test)

    print("Test Accuracy (Final): " + str(accuracy))

'''
    For the experiment, adjust the list [784,...,10] as desired to test other architectures.
    You are encouraged to play around with any of the following values if you so desire:
    E, lr, bs, activation
    '''
if __name__ == "__main__":
    main()
```

```
Test Accuracy (Final): tensor(84.4881)
```

[ ]