Handwritten Digit Recognition using ANN

What is this project?
I made a neural network that looks at images of handwritten numbers and tells what digit it is (0 to 9).

Type of Problem: Multi-class Classification (10 possible outputs)

Algorithm Used: ANN — Artificial Neural Network (Deep Learning)

Tools and Libraries: Python, TensorFlow, Keras, NumPy, Matplotlib

Dataset: MNIST — a famous dataset with 70,000 images of handwritten digits

Steps I followed:

1. Loaded MNIST dataset
2. Normalized pixel values (0-255 → 0-1)
3. Built a neural network with input, hidden, and output layers
4. Trained the model
5. Tested accuracy on unseen images

What I learned: How to build a basic neural network and how image data works in deep learning.