Homework 1: Machine Learning Practice

Objective

Gain hands-on experience by running and analyzing example Python codes from the text-book *Hands-on Machine Learning with Scikit-Learn, Keras & TensorFlow (2nd Edition)* by Aurélien Géron.

Task 1: Example Code (Pages 298–307)

- Combine all example Python codes from pages 298–307 into one Python script.
- Run the complete script.
- Show and explain all output results, printed messages, and generated figures.

Task 2: California Housing Problem (Pages 307–313)

- Implement all Python codes from page 307 (bottom) to page 313.
- Run the program and present:
 - Final training and evaluation results.
 - Predicted vs. actual values or figures generated by the code.
 - Brief discussion on what the results indicate about the model's performance.

Submission Requirements

- Submit your .py script(s) and output screenshots or plots.
- Include a short summary (1–2 slides) of your observations and learning points.

Deadline: [Oct 18, 2025]