Lab 6: k-Nearest Neighbors & ID Trees

Submit Assignment

Due Thursday by 11:59pm   **Points** 5   **Submitting** a file upload

Available   Oct 5 at 12:01am - Nov 10 at 11:59pm about 1 month

Lab 6: k-Nearest Neighbors & ID Trees

To complete Lab 6, download: **lab6.zip**.

Lab 5 is due on **Saturday, October 24th at 11:59pm EDT**.

Contents

- **1 Breaking down a problem into smaller sub-problems**
- **2 Survey**

Breaking down a problem into smaller sub-problems

For your convenience, we have split this lab into two sections. Part 1 covers the topic of **identification trees**, and Part 2 covers **k-nearest neighbors**.

The deadline to complete Lab 6 (both **Part 1 (ID Trees)** and **Part 2 (kNN)**) is **Thursday, October 29 at 11:59pm EDT**. Once you have completed Lab 6 and it passes the local tests, submit **only** your lab6.py here. All of your answers belong in the main file lab6.py. Please **ensure that your file is named lab6.py** and not something different.

We strongly suggest that you complete Lab 5 by Thursday, October 15, so that you have enough time to work on Lab 6. We also strongly suggest that you finish **Part 1 (ID Trees)** by Saturday, October 24, so that you have enough time to work on **Part 2 (kNN)**.

Survey

Please answer these questions at the bottom of your lab file:

- NAME: What is your name? (string)
- COLLABORATORS: Other than 6.034 staff, whom did you work with on this lab? (string, or empty string if you worked alone)

- `HOW_MANY_HOURS_THIS_LAB_TOOK`: Approximately how many hours did you spend on this lab? (number or string)

- `WHAT_I_FOUND_INTERESTING`: Which parts of this lab, if any, did you find interesting? (string)

- `WHAT_I_FOUND_BORING`: Which parts of this lab, if any, did you find boring or tedious? (string)

- (optional) `SUGGESTIONS`: What specific changes would you recommend, if any, to improve this lab for future years? (string)

(We'd ask which parts you find confusing, but if you're confused you should really ask a TA.)