



Department of Computer Science
UNIVERSITY OF COLORADO **BOULDER**



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LECTURE 1B

Roadmap

- Introductions
- Content Questions
- Administrivia Questions
- KNN Example
- Homework 1

Outline

- 1 Introductions**
- 2 Content Questions
- 3 Administrivia Questions
- 4 KNN Example

Introductions

Outline

1 Introductions

2 Content Questions

3 Administrivia Questions

4 KNN Example

Content Questions

Content Questions

Content Questions

Content Questions

Outline

1 Introductions

2 Content Questions

3 Administrivia Questions

4 KNN Example

Administrivia Announcements

- Nice to be in caete classroom
- Room in that section of the class
- I'm offering it again in the Fall
- Still looking for one more grader (4hr / week)

Administrivia Questions

Administrivia Questions

Administrivia Questions

Administrivia Questions

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- 4 KNN Example**

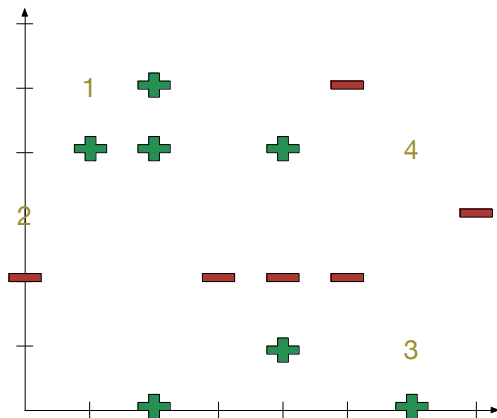
KNN Classification

$$K = 1$$

What is the
prediction of y_1 ?

Closest points:

Prediction:



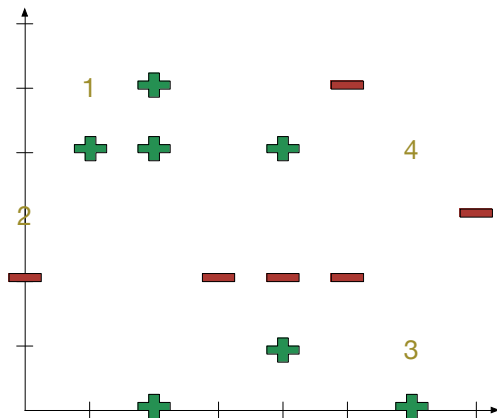
KNN Classification

$$K = 1$$

What is the
prediction of y_2 ?

Closest points:

Prediction:



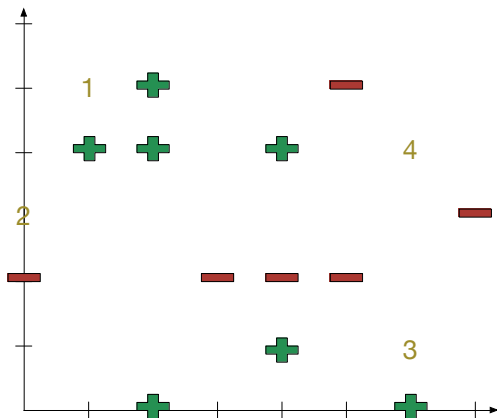
KNN Classification

$$K = 1$$

What is the
prediction of y_3 ?

Closest points:

Prediction:



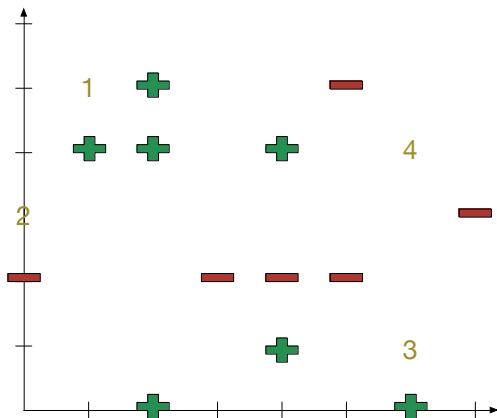
KNN Classification

$$K = 1$$

What is the
prediction of y_3 ?

Closest points:

Prediction:



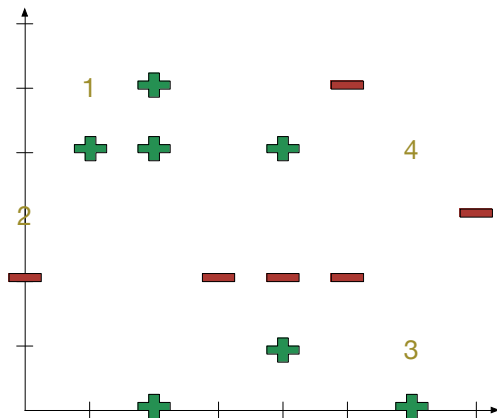
KNN Classification

$K = 2$

What is the
prediction of y_1 ?

Closest points:

Prediction:



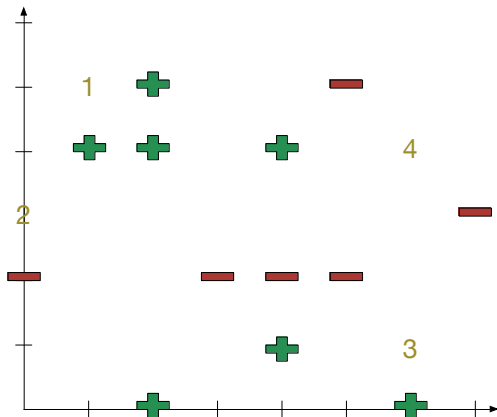
KNN Classification

$K = 2$

What is the
prediction of y_2 ?

Closest points:

Prediction:



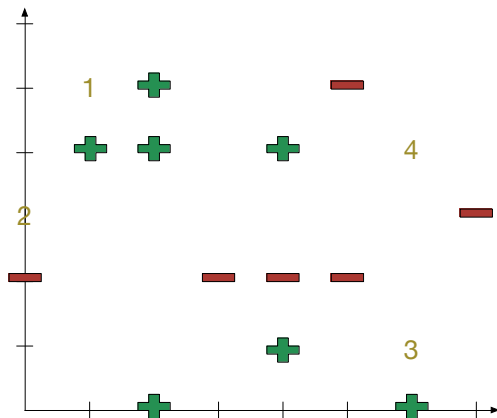
KNN Classification

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Closest points:

Prediction:



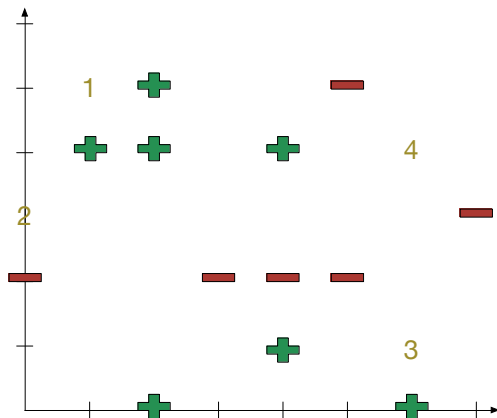
KNN Classification

$K = 2$

What is the
prediction of y_3 ?

Closest points:

Prediction:



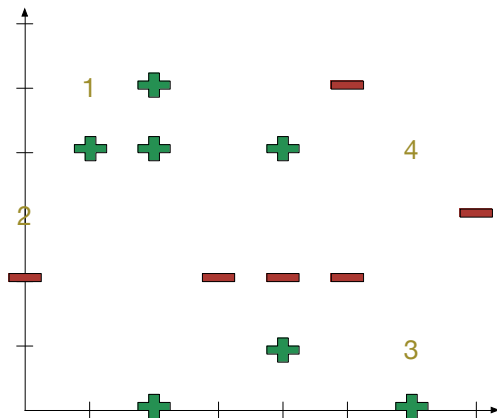
KNN Classification

$K = 3$

What is the
prediction of y_1 ?

Closest points:

Prediction:



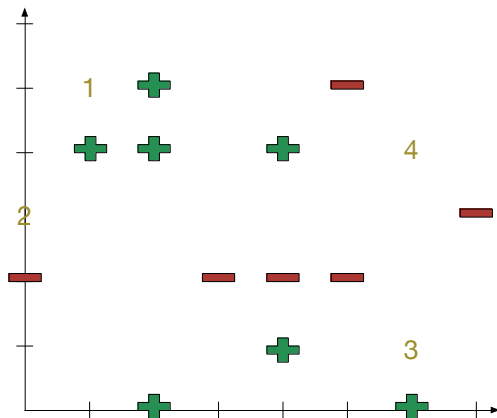
KNN Classification

$K = 3$

What is the
prediction of y_2 ?

Closest points:

Prediction:



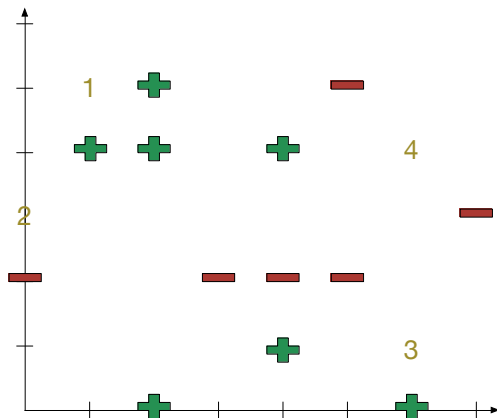
KNN Classification

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What is the
prediction of y_3 ?

Closest points:

Prediction:



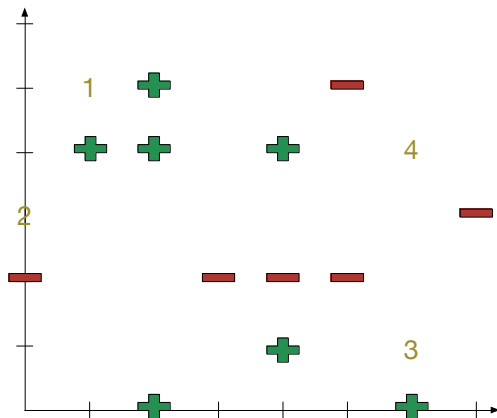
KNN Classification

$K = 3$

What is the
prediction of y_3 ?

Closest points:

Prediction:



HW1

- Now posted
- Designed to be easy
- Main goal: comfortable with Python / infrastructure