

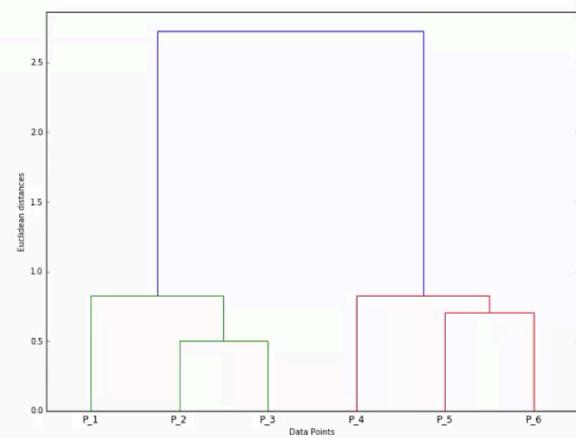
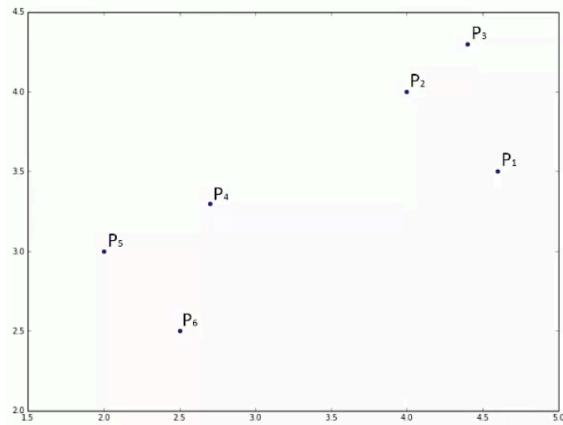
Hierarchical Clustering Using Dendrograms

HC Intuition: Using Dendrograms

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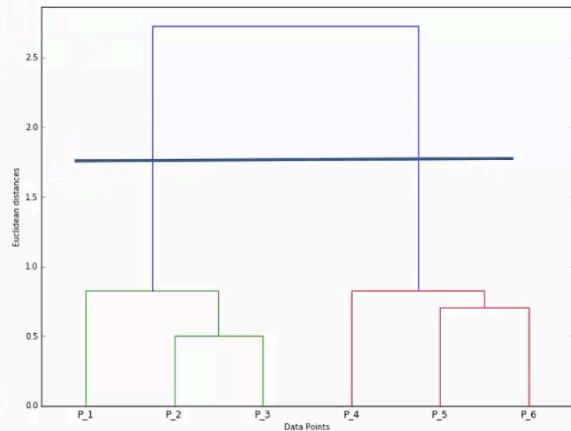
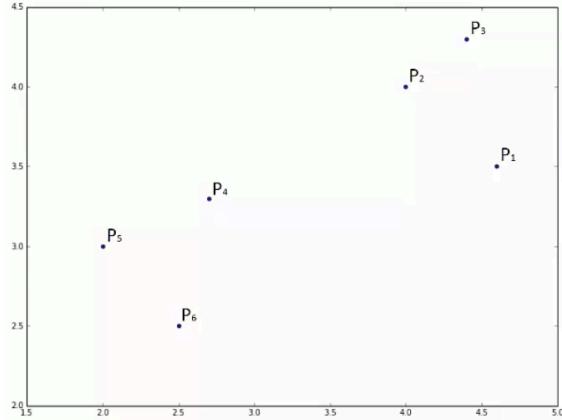
Dendrograms - Two Clusters



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Dendograms - Two Clusters

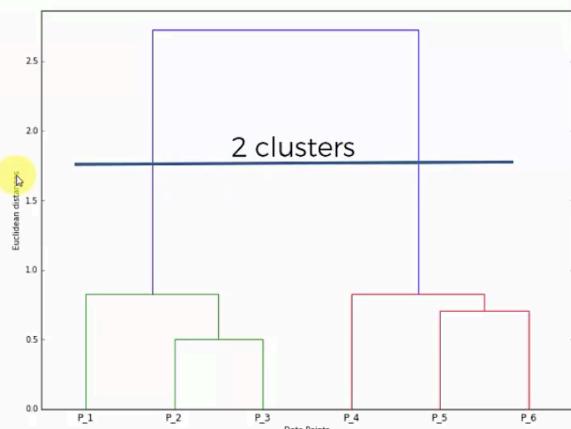
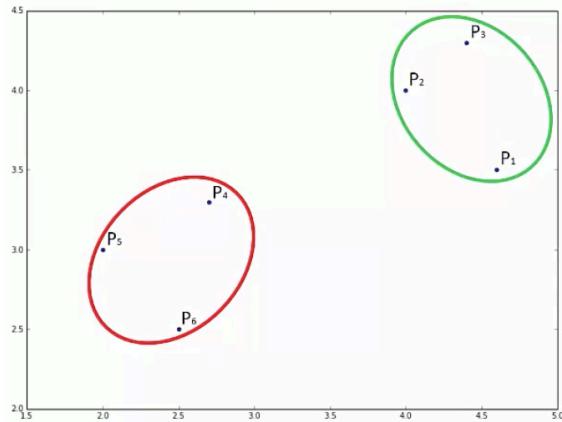


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The horizontal line is called “threshold” and we choose our threshold for the dividing our cluster into more clusters.

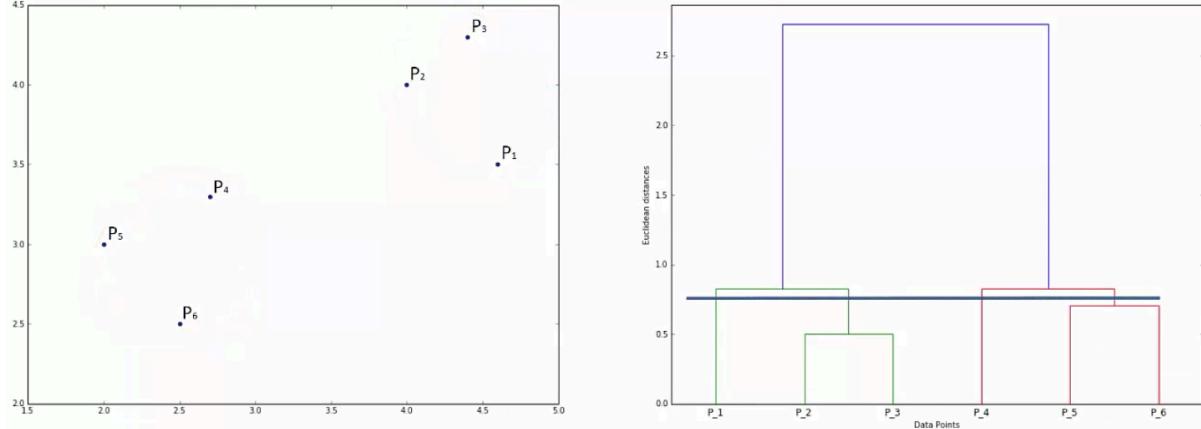
Dendograms - Two Clusters



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Dendograms - Four Clusters

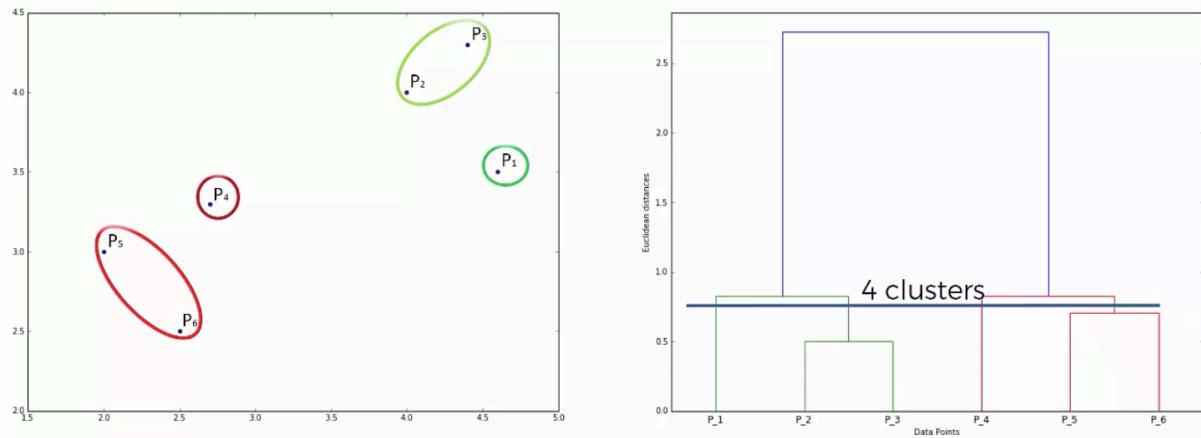


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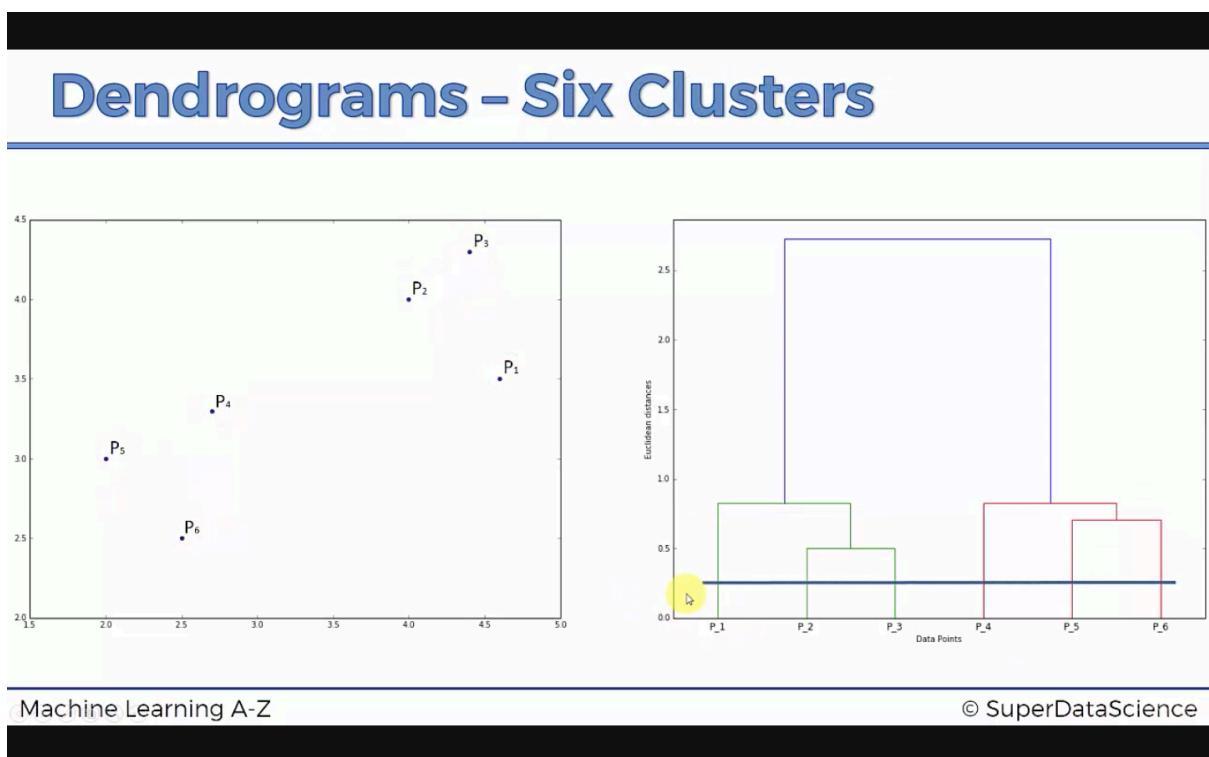
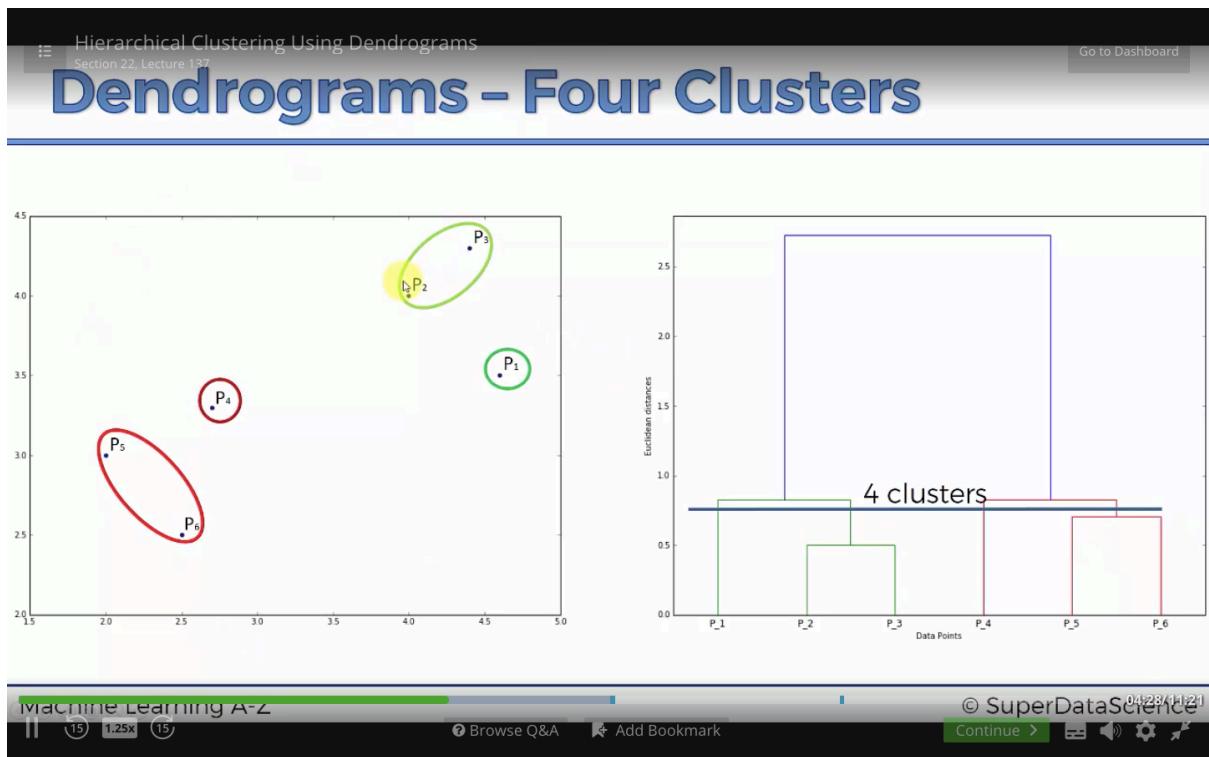
From our vertical line we can count the number of clusters, and by counting the number of vertical lines it crosses.

Dendograms - Four Clusters

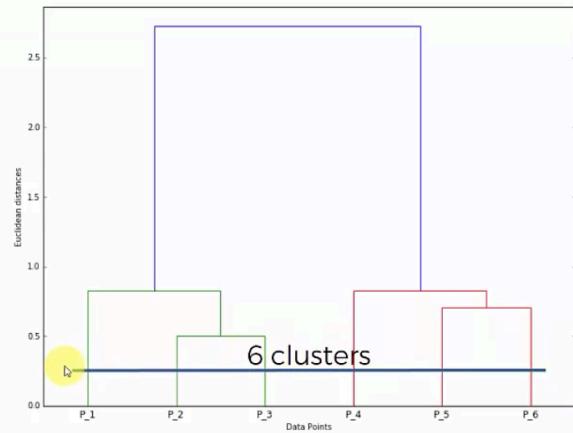
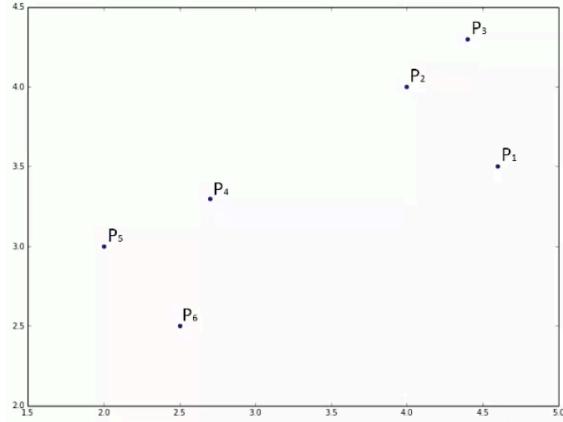


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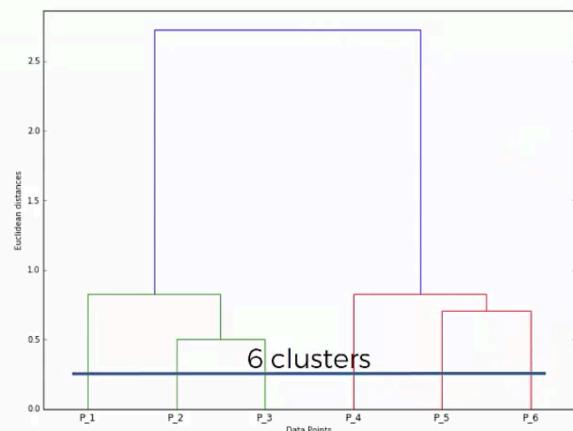
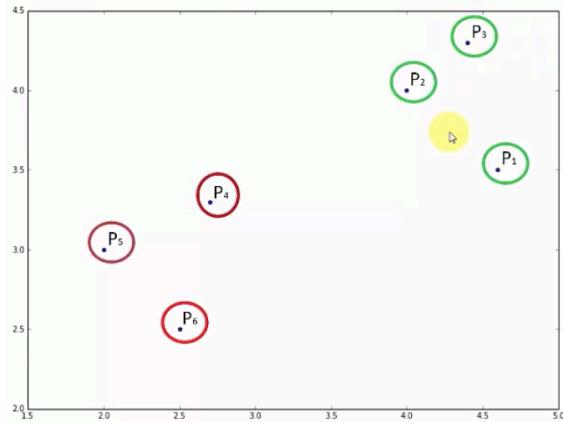
Dendograms - Six Clusters



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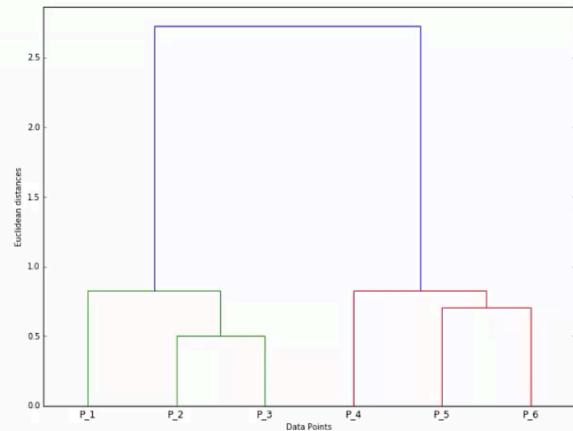
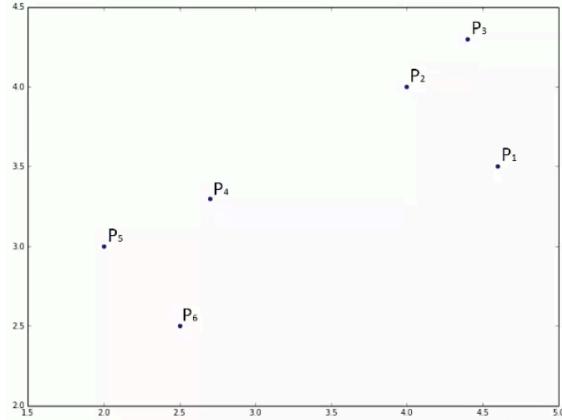
Dendograms - Six Clusters



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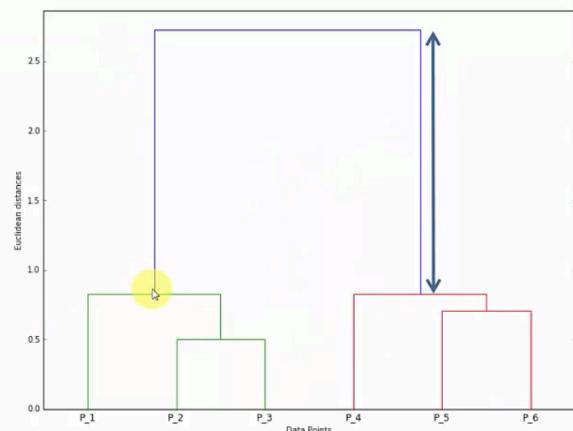
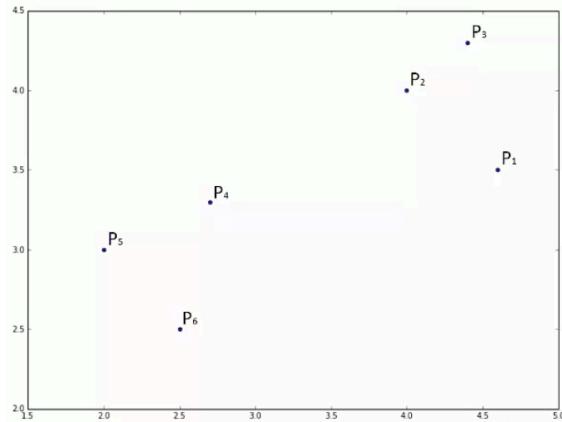
Dendograms - Optimal # of Clusters



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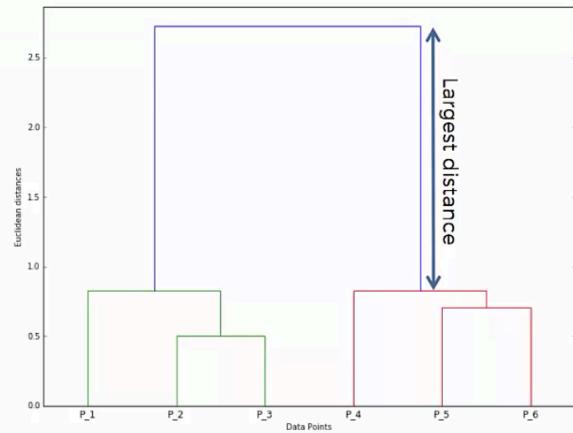
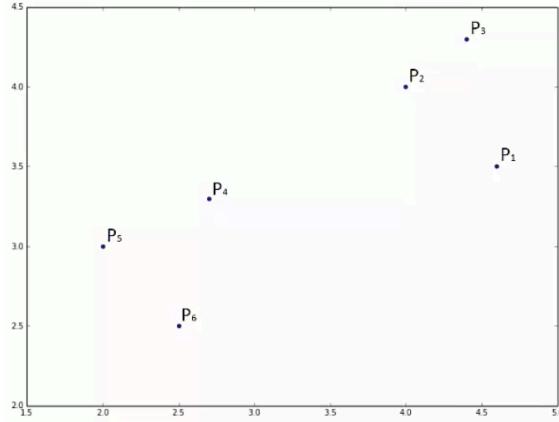
Dendograms - Optimal # of Clusters



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Dendograms - Optimal # of Clusters

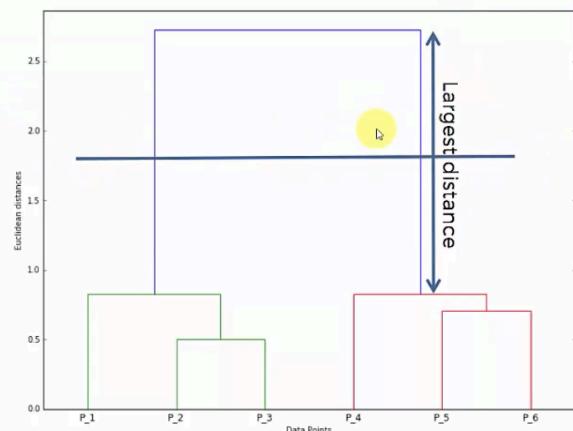
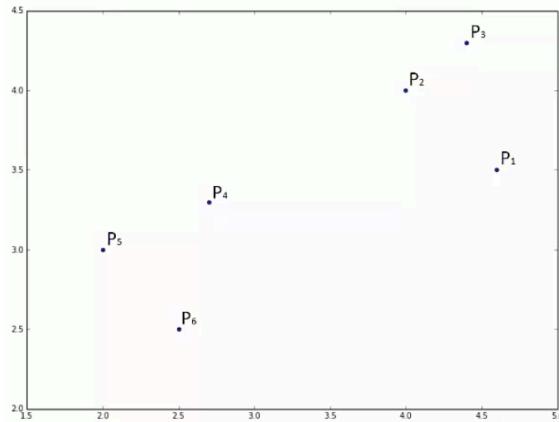


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We use our threshold between the largest vertical line for having the optimal number of clusters.

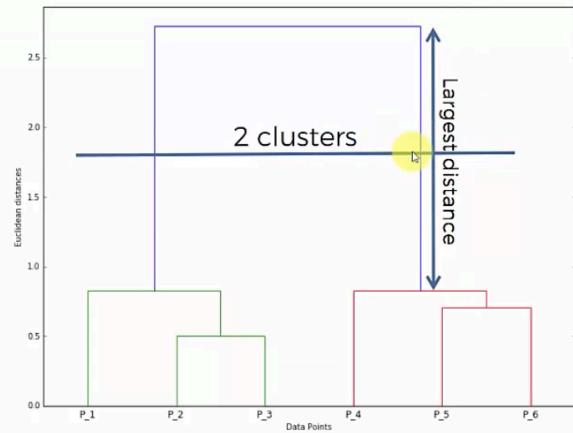
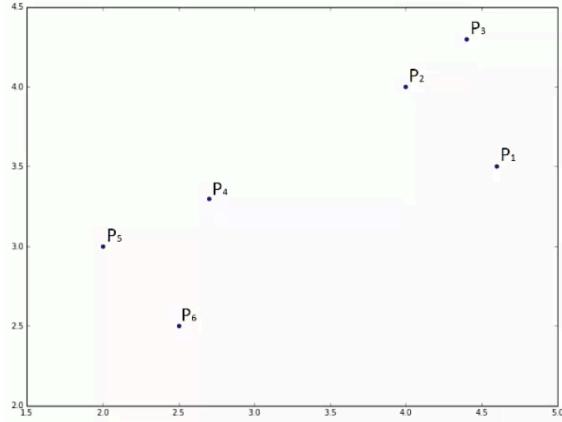
Dendograms - Optimal # of Clusters



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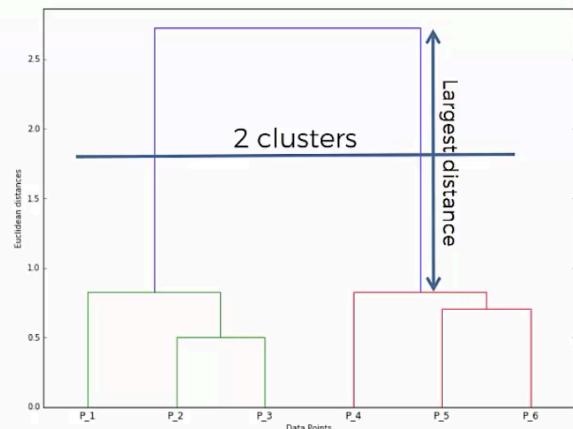
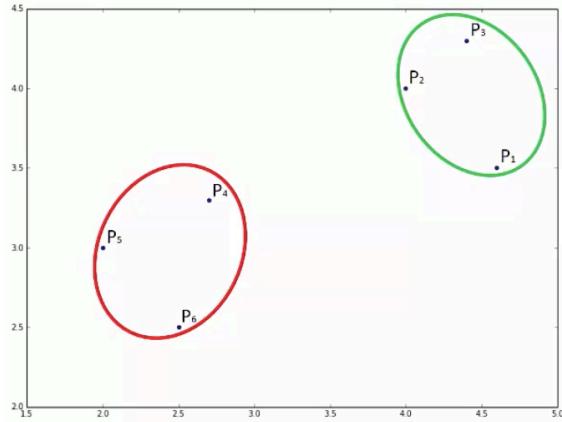
Dendograms - Optimal # of Clusters



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Dendograms - Optimal # of Clusters



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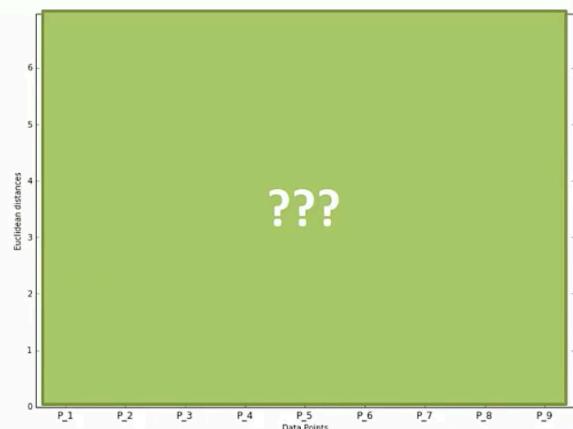
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Knowledge Test

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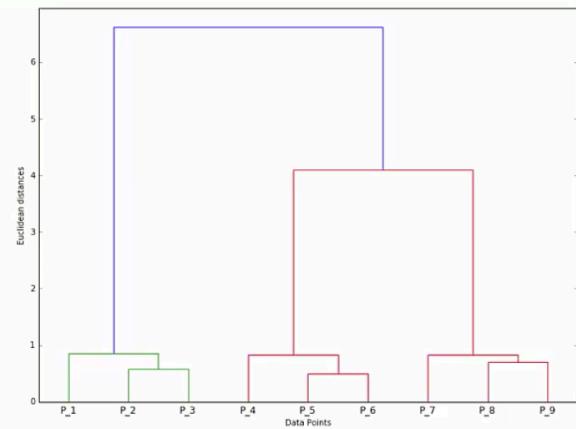
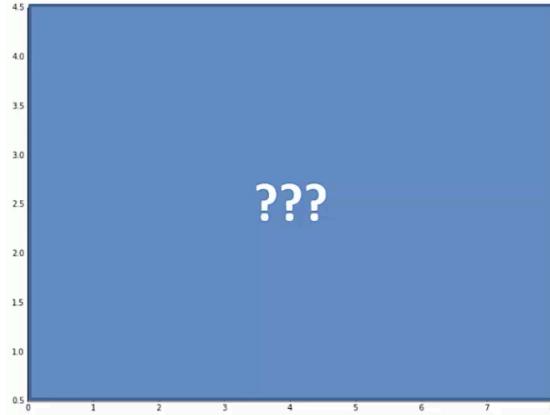
Dendograms - Knowledge Test



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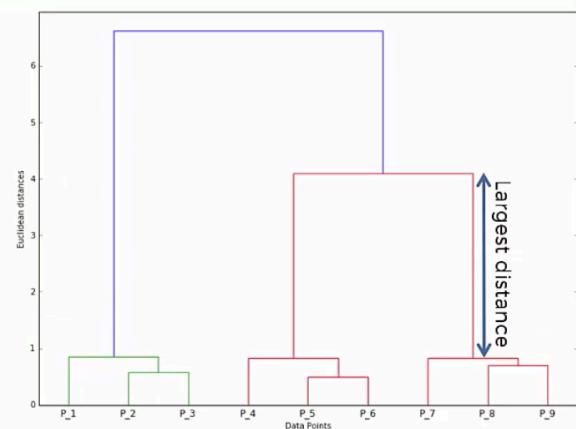
Dendograms - Knowledge Test



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Dendograms - Knowledge Test



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Dendograms - Knowledge Test

