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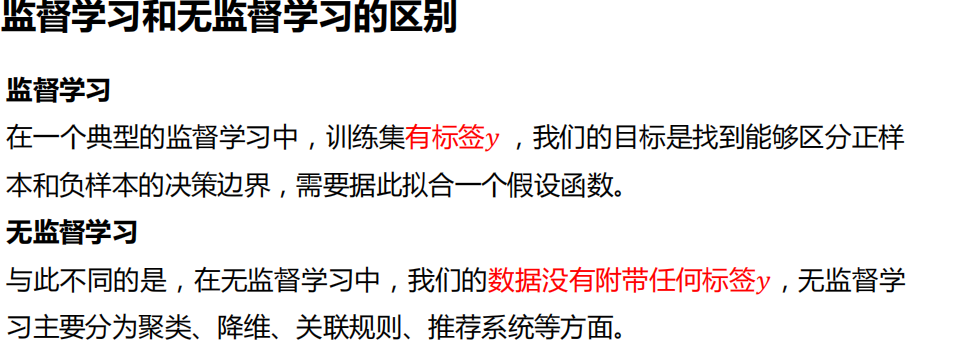
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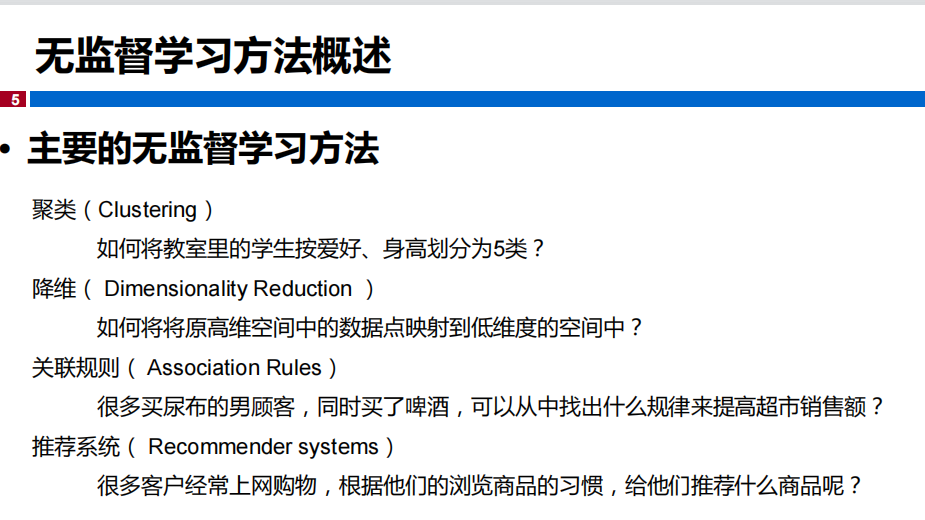
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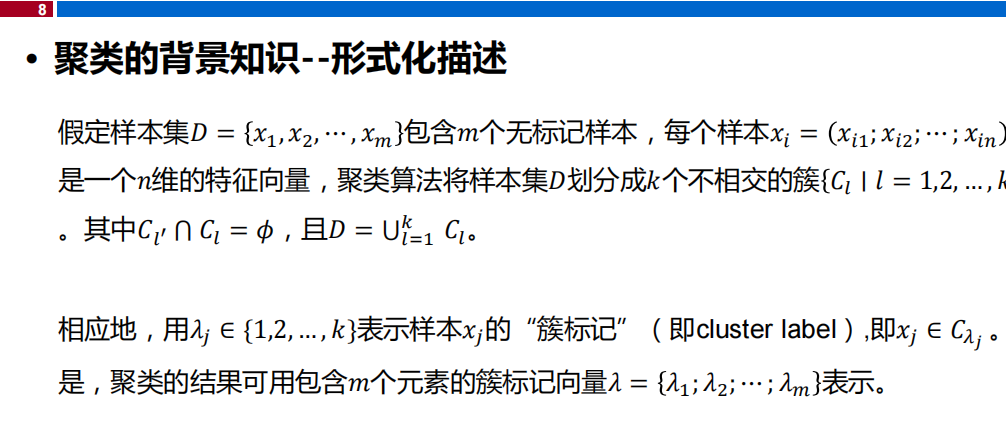
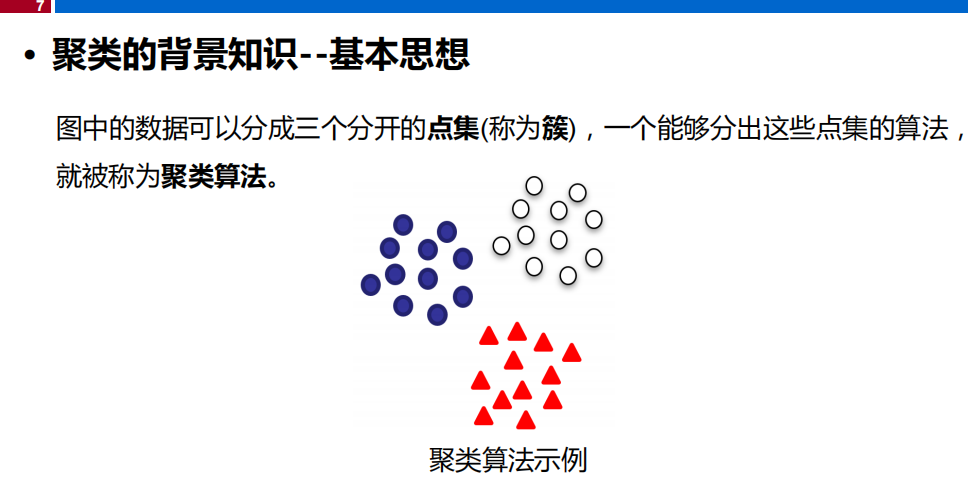
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# 无监督学习概述

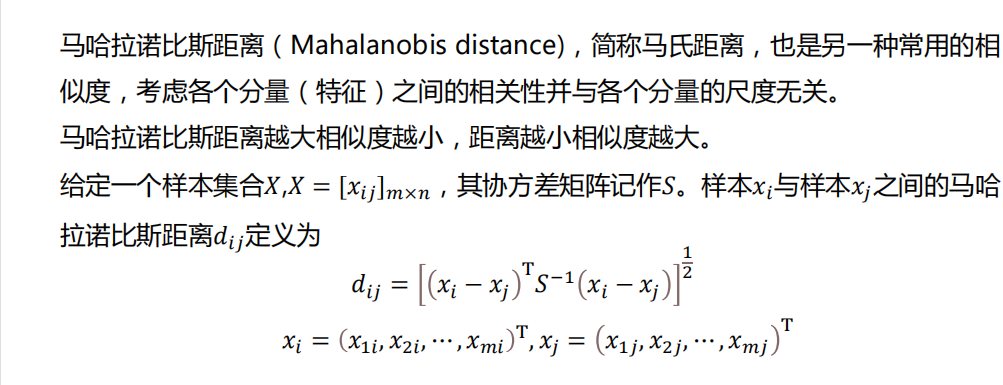
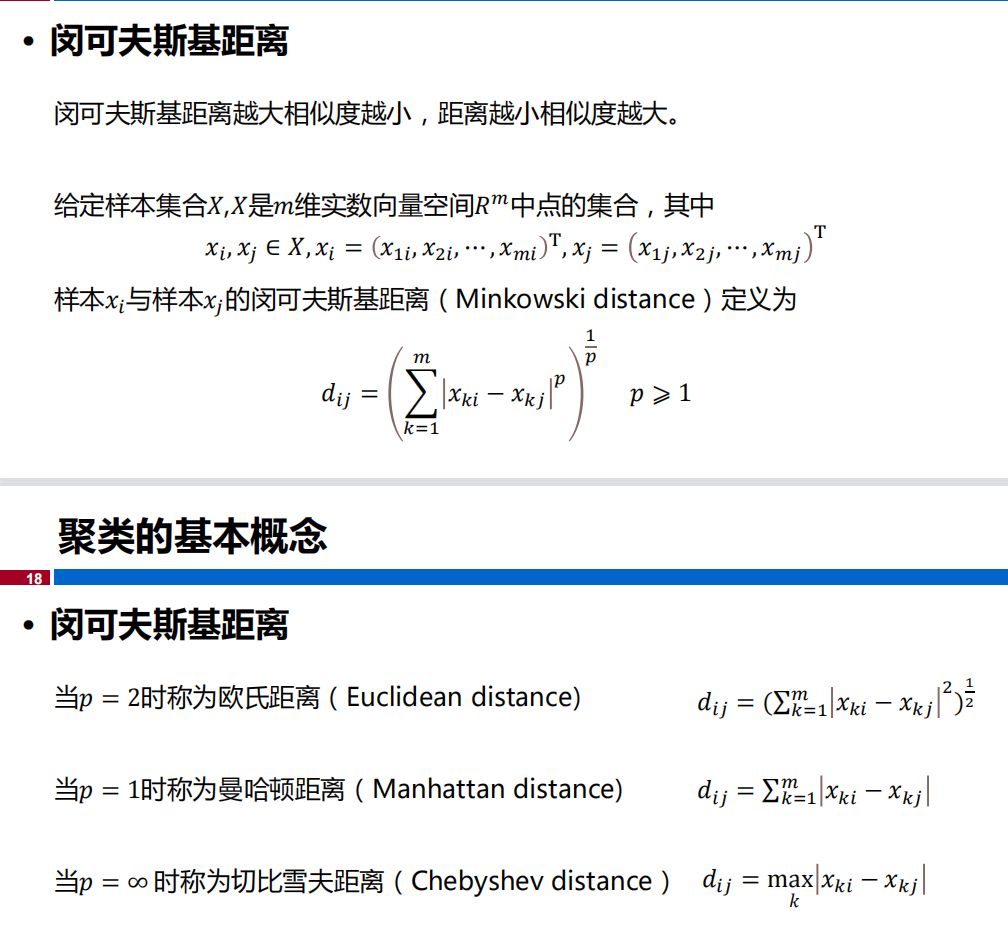
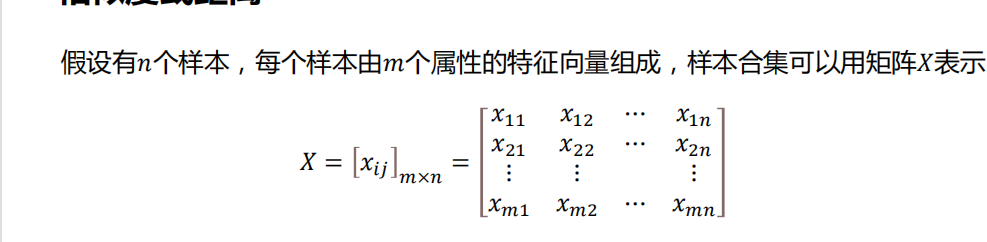
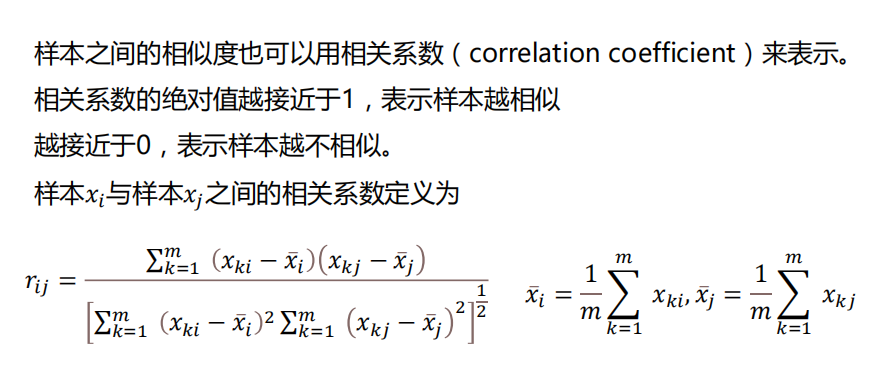




# 聚类任务概述



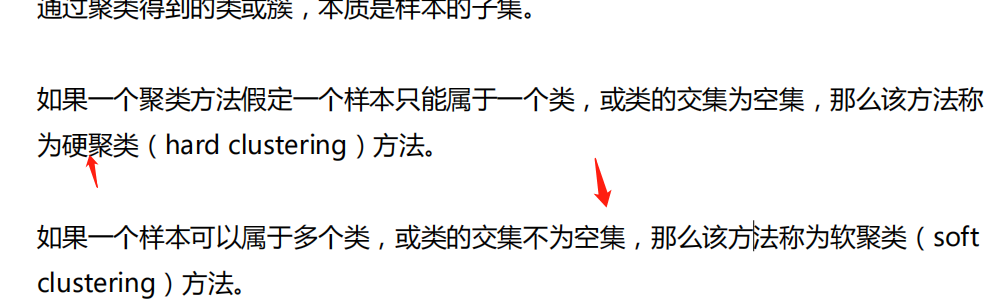
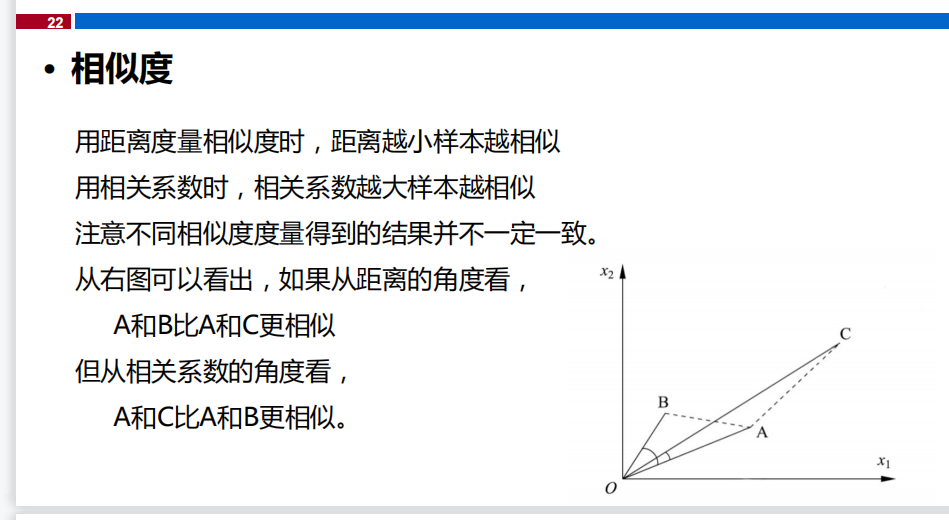
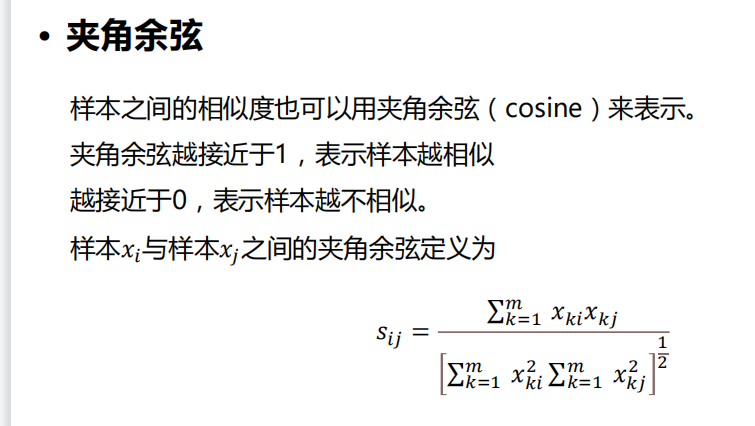
# 聚类的基本概念

s

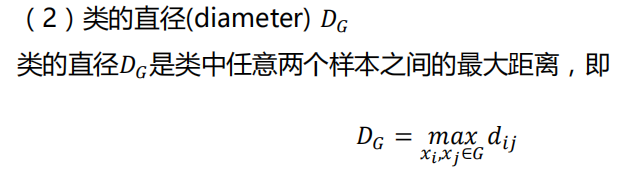
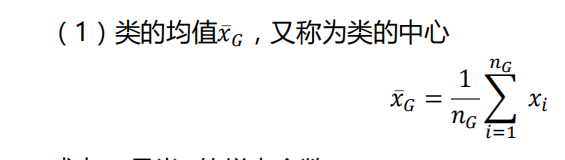
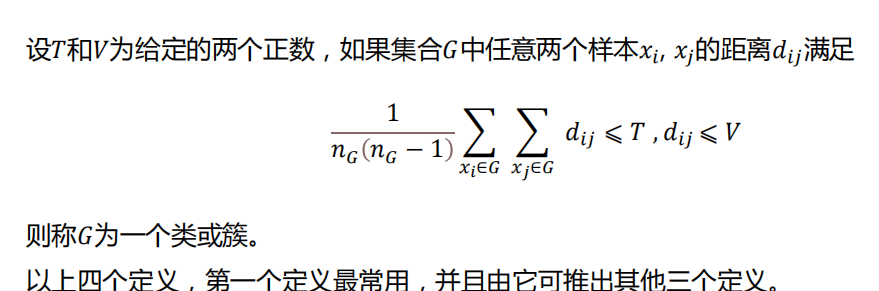
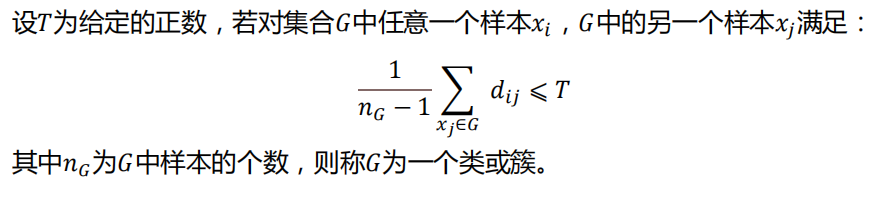
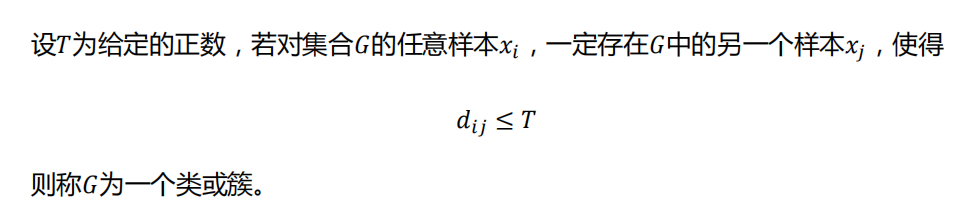
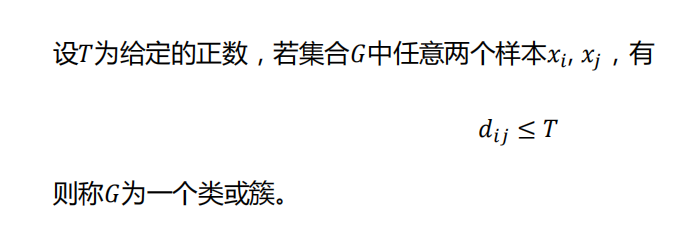
相似度+距离量度 ， 相似度可以用夹角余弦以及相关系数表示。

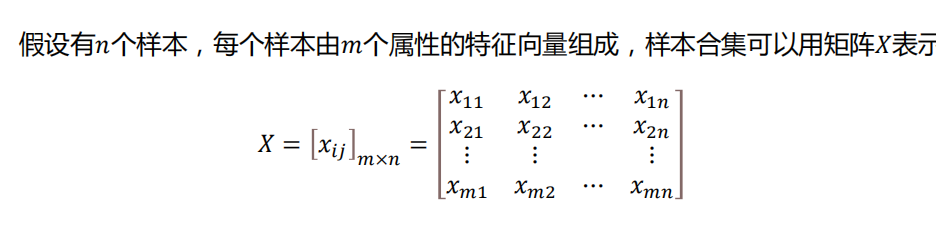
用距离度量相似度时，距离越小样本越相似

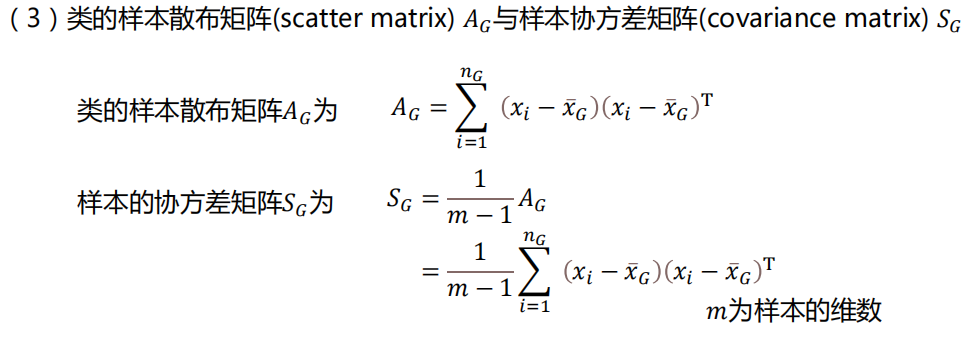
用相关系数时，相关系数越大样本越相似



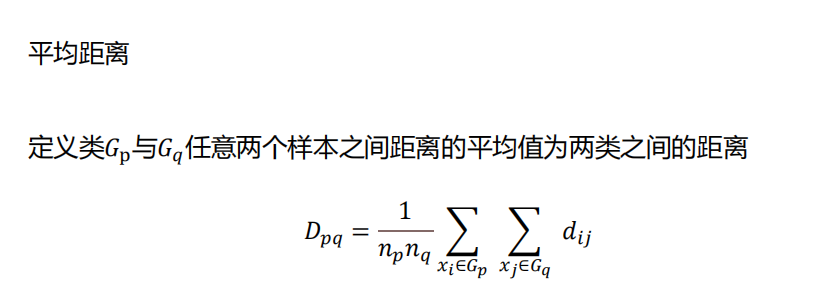
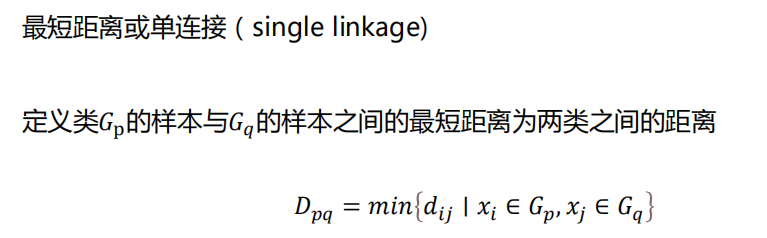
类或簇的定义(四种)：



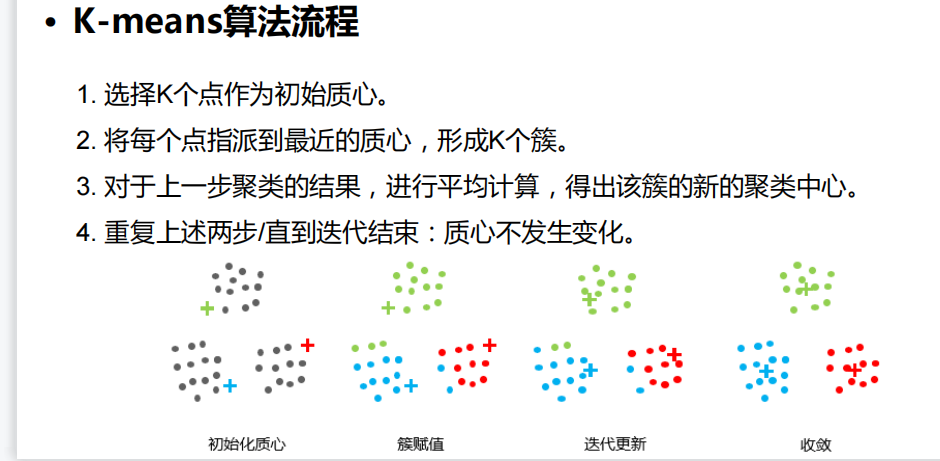
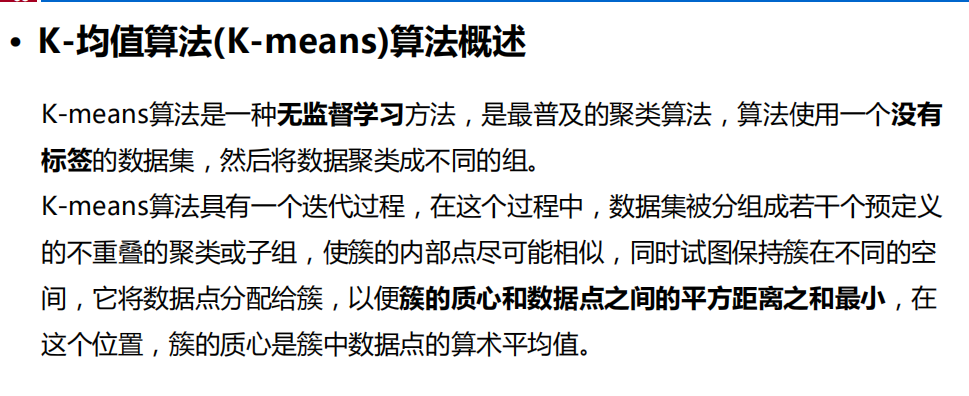


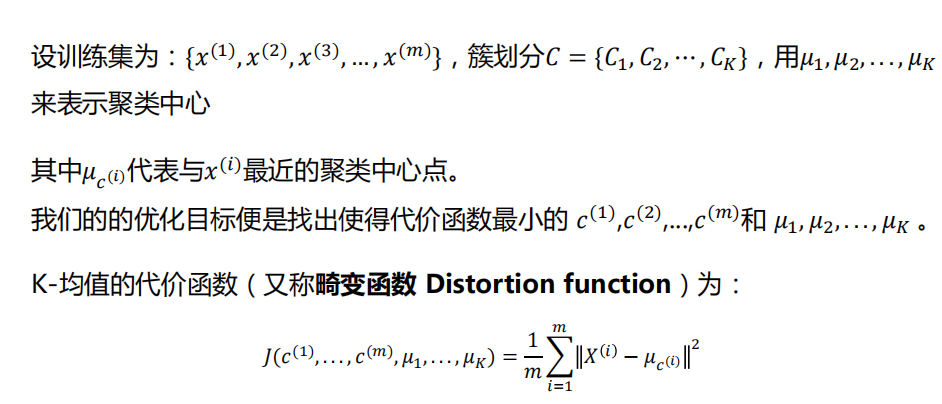


四种距离

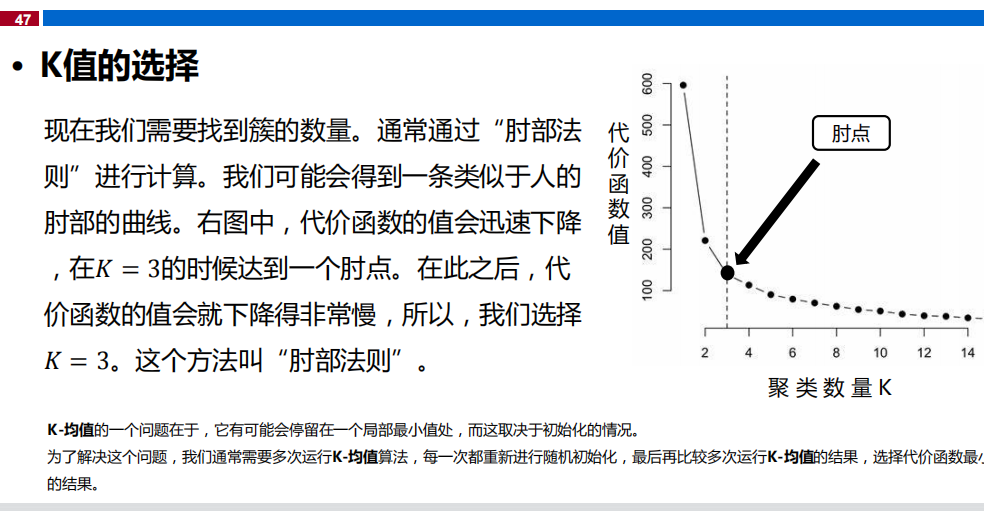
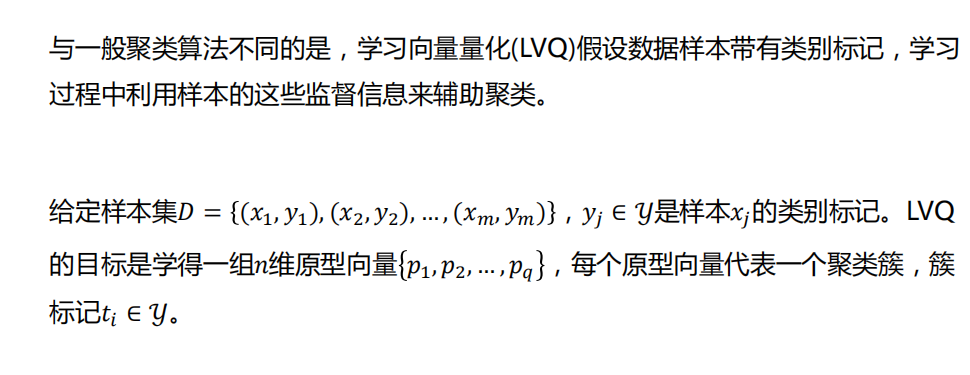
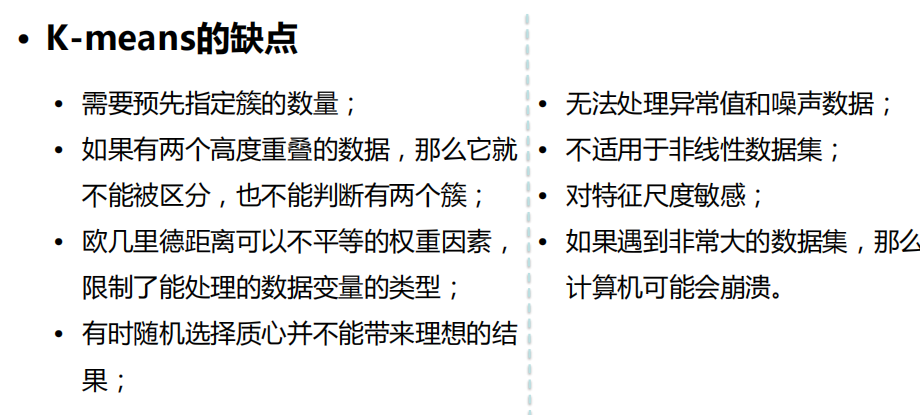
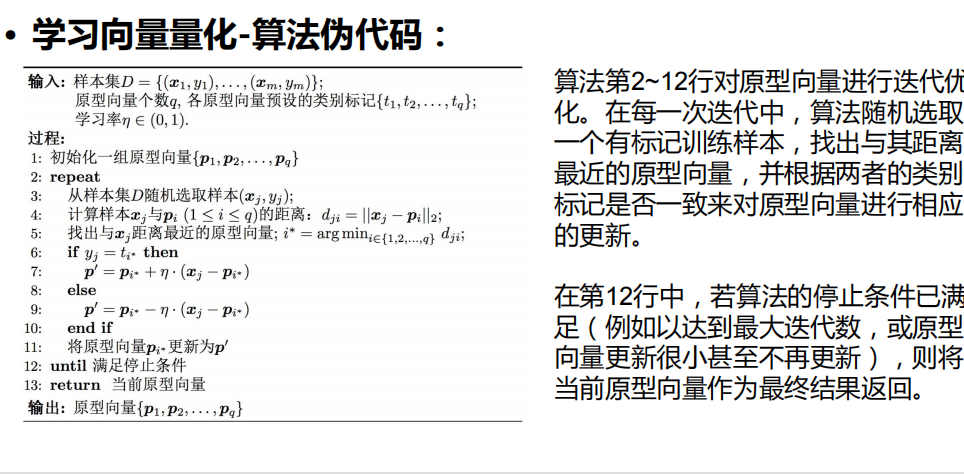


# 原型聚类





代价函数： 每一个X到其最近簇的距离平方和的平均值

  56突然非常小如涛涛涛涛涛涛涛涛涛涛涛涛图没看见吗

# 密度聚类

# 层次聚类