



# **Session 3: Divisive Clustering Algorithms**

# Question

---

- ❑ Which of the following statements, if any, is FALSE?
  - ❑ In agglomerative clustering, cluster sizes from one iteration to the next may never decrease.
  - ❑ In divisive clustering, cluster sizes from one iteration to the next may never increase.
  - ❑ In agglomerative clustering, once two objects are grouped into the same cluster, they will never be separated into different clusters again.
  - ❑ In divisive clustering, it's possible for two points that are assigned to different clusters to fall into the same cluster later on.
- ❑ Answer: Last option. Divisive algorithms will only search within each partition to refine clusters, so it's not possible for two points in different clusters to be merged into the same cluster later on.