



## Knowledge Check

**Knowledge  
Check  
1**

Which linkage hierarchical clustering produces chaining amongst clusters?

- A. Single Linkage
- B. Average Linkage
- C. Complete Linkage
- D. Ward Linkage



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The correct answer is **A.**

**Single linkage sometimes produces chaining amongst clusters because the smallest distance between pairs is the only value taken into consideration.**

**Knowledge  
Check  
2**

**Which of the following is required by K-means clustering?**

- A. Defined distance metric
- B. Number of clusters
- C. Initial guess as to cluster centroids
- D. All of the mentioned



**Knowledge  
Check**  
**2**

Which of the following is required by K-means clustering?

- A. Defined distance metric
- B. Number of clusters
- C. Initial guess as to cluster centroids
- D. All of the mentioned



The correct answers are **D**.

**K-means clustering follows a partitioning approach. The partitioning clustering approach is a clustering method that needs one to classify observations, make an initial guess about the cluster centroids, define the distance metric and input data about the number of clusters.**