1. D
2. D
3. C
4. B
5. D
6. C
7. D
8. A
9. A
10. B
11. A
12. B
13. Having clustering methods helps in restarting the local search procedure and removing the inefficiency. In addition, clustering helps to determine the internal structure of the data. This clustering analysis has been used for model analysis, and vector region of attraction. Clustering helps in understanding the natural grouping in a dataset. Their purpose is to make sense to partition the data into some group of logical groupings. Clustering quality depends on the methods and the identification of hidden patterns. They, play a wide role in applications like marketing economic research and weblogs to identify similarity measures, Image processing, and spatial research. They are used in outlier detections.

14. There are two important elements in improving the quality of clustering: improving the weights of the features in a document vector and creating a more appropriate distance measure. A good document vector has the right kind of features, with higher weights assigned to the more important ones. In text data, there are two ways to improve the quality of a document vector: by removing noise and using a good weighting technique. If the vectors are of the highest quality, the biggest improvement in cluster quality comes from the choice of an appropriate distance measure. We've seen that the cosine distance is a good distance measure for clustering text documents. To illustrate the power of a custom distance measure, we create a different form of the cosine distance measure that exaggerates distances: it makes big distances bigger and small distances smaller.