

MACHINE LEARNING ASSIGNMENT – 3

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. What is the importance of clustering?

Clustering is used to group similar data points together based on their characteristics. It is unsupervised machine learning method hence no supervision is provided to the algorithm and since there is no label so we used to predict some patterns in the dataset.

We do use clustering method in below applications-

- Market Segmentation
- Statistical Data Analysis
- Image Segmentation
- Anomaly Detection
- Recommendations (Netflix and Amazon web series recommendations)
- Search Engine Recommendations
- Customer Segmentations

14. How can I improve my clustering performance?

I think **Principle Component Analysis** could be more useful in enhancing the performance of cluster algorithms as it can reduce a large number of features into comparatively less unlabeled data points with the help of dimensionality reduction and it would make clustering more productive as well.