# Clustering-3

## Assignment Questions

PW SKILLS

**Q1. Explain the basic concept of clustering and give examples of applications where clustering is useful.**

**Q2. What is DBSCAN and how does it differ from other clustering algorithms such as k-means and hierarchical clustering?**

**Q3. How do you determine the optimal values for the epsilon and minimum points parameters in DBSCAN clustering?**

**Q4. How does DBSCAN clustering handle outliers in a dataset?**

**Q5. How does DBSCAN clustering differ from k-means clustering?**

**Q6. Can DBSCAN clustering be applied to datasets with high dimensional feature spaces? If so, what are some potential challenges?**

**Q7. How does DBSCAN clustering handle clusters with varying densities?**

**Q8. What are some common evaluation metrics used to assess the quality of DBSCAN clustering results?**

**Q9. Can DBSCAN clustering be used for semi-supervised learning tasks?**

**Q10. How does DBSCAN clustering handle datasets with noise or missing values?**

**Q11. Implement the DBSCAN algorithm using a python programming language, and apply it to a sample dataset. Discuss the clustering results and interpret the meaning of the obtained clusters.**

**Note:** *Create your assignment in Jupyter notebook and upload it to GitHub & share that github repository link through your dashboard. Make sure the repository is public.*