**CMPE256- Assignment 4**

**Hierarchical Clustering (Agglomerative) Single Link**

Given data points provided, develop Hierarchical Clustering(Agglomerative) using Single Link technique?

Learning Objective: Apply Single Link Hierarchical Clustering(Agglomerative) :

Hierarchical algorithms can be further divided into divisive algorithms and agglomerative algorithms. Divisive clustering begins with all data elements in one cluster, which is later successively divided into smaller ones. On the other hand, agglomerative clustering begins with single-element clusters and works by successively merging them into larger ones.

Part B: please develop Cluster Python program and run single-link, Complete-link and average-link Clusters and upload code and screen captures. (10)

Data Points:

Chart, scatter chart

Description automatically generated

**Part A**

Single link clustering is done manually, PDF is uploaded on Github.

Github Link- <https://github.com/charucheema/CMPE256_HR_Assignment/blob/main/CMPE256_Single%20Link.pdf>

**Part B**

Python program written on Google collab. PDF is uploaded in Github.

Github Link-

<https://github.com/charucheema/CMPE256_HR_Assignment/blob/main/CMPE256_HierarchicalClustering(Agglomerative)SingleLink_Assignment.ipynb>