

DSE 2141– Data Analytics Lab
Lab 9 – Date: 13th September 2023

EXERCISE 1:

An online grocery store has captured amount spent per annum (in Indian rupees) by 20 customers on apparel and beauty and healthcare products and given in the file customerspends.csv. It contains the following records.

- Customer – Customer ID
 - Apparel – Amount spent in apparel products
 - Beauty and Healthcare – Amount spent in beauty and healthcare products
1. Create a scatter plot to depict the customer spends on apparel and beauty and healthcare products.
 2. Identify number of clusters existing in the dataset.
 3. Use dendrogram and elbow method to verify if the number of clusters suggested is same as clusters visible in the scatter plot in Question 1.
 4. Create the number of clusters as suggested by the elbow method using K-means algorithm.
 5. Print the records of customers in each cluster and the cluster center of each cluster separately. Explain the clusters intuitively.