

REPORT

Lab11.Shopping Mall Customer Segmentation using Clustering

In this lab we have learned to detect clusters from customer data and perform analytics to understand customers who visit malls, using KMeans and Agglomerative Clustering methods.

This kind of problem comes under unsupervised machine learning where we won't train our model will just make understanding just by visualizing with various plot.

Our first step is to check the data and perform skew analysis and perform normalization if it is required on our case we don't need to normalize the data next we need to build KMeans model with number of clusters.

Select the best value for K using inertia error values and Elbow method then perform cluster analysis to understand cluster statistics.

Now reduce dimensions of data using PCA components and build KMeans model, MeanShift clustering model on dimension reduced data. Now Create Agglomerative Clustering then visualize hierarchical clusters using Dendrogram.