

### RESULTS AND OBSERVATIONS RECORDED:

Standard classifiers were used for the purpose of comparison and their results are recorded below:

#### (SUPERVISED ALGORITHMS)

Model	Accuracy	Precision	Recall	F1_score
Decision Tree	0.7186	0.7186	0.7182	0.7182
KNN	0.7533	0.7698	0.7354	0.7328
SVM	0.6647	0.6998	0.6792	0.6729
LDA	0.6088	0.6357	0.6119	0.6100
LR	0.6396	0.6609	0.6476	0.6445
Random Forest	0.7302	0.7422	0.7205	0.7255
Naïve Bayes	0.5703	0.6107	0.5715	0.5701

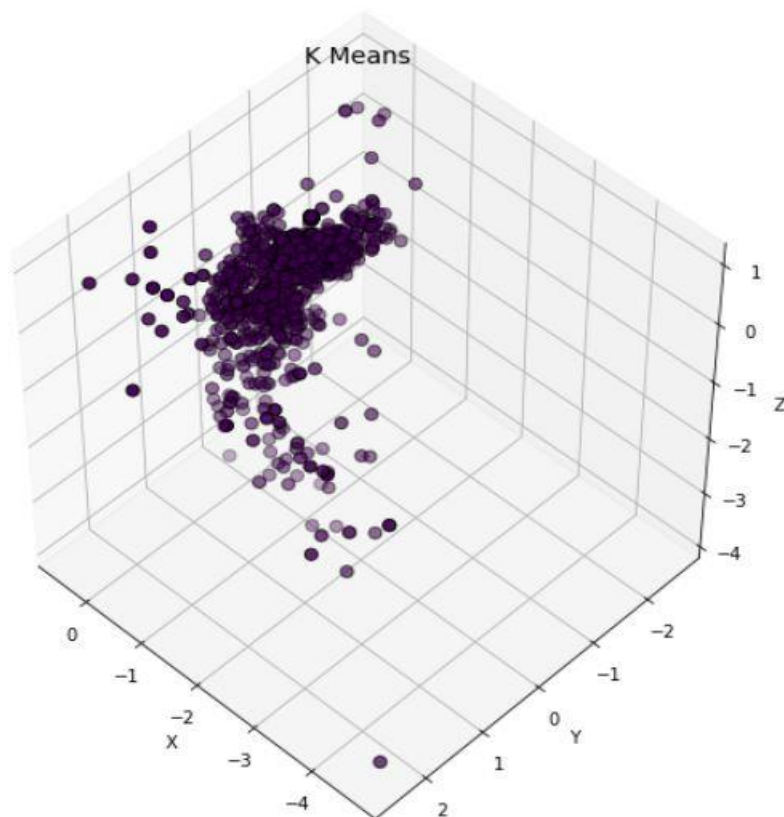
#### (UNSUPERVISED ALGORITHM)

Using K-means clustering:

For k= 1

R2\_score = -2.4060

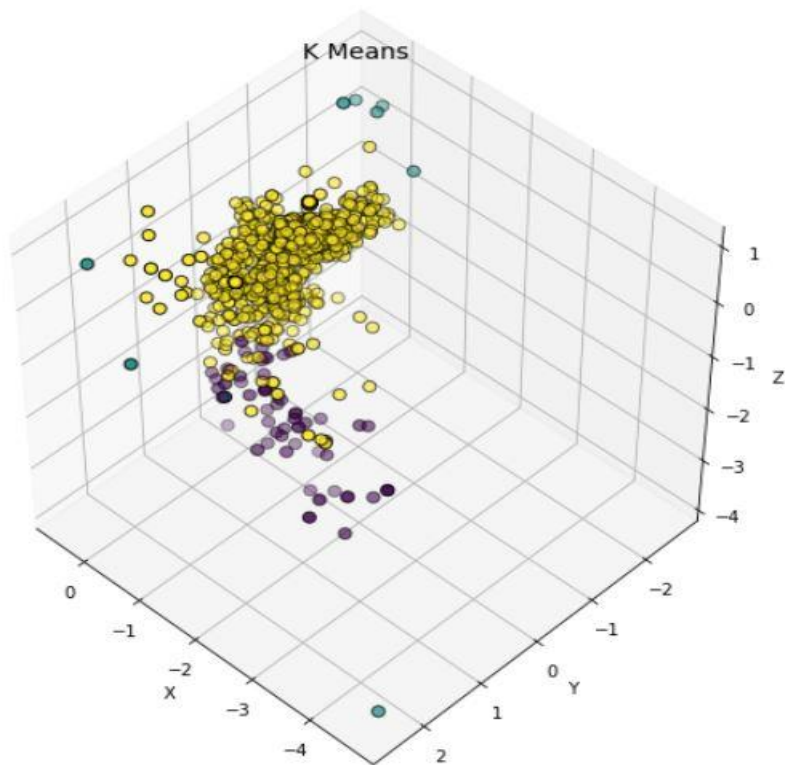
Scatter Plot:



For  $k = 3$

$R^2_{\text{score}} = -0.6644$

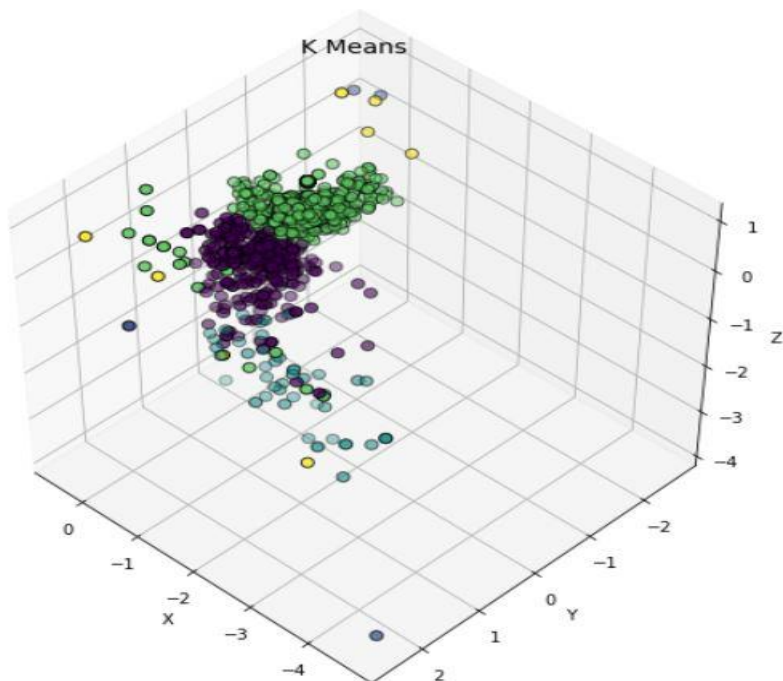
Scatter plot:



For  $k = 5$

$R^2_{\text{score}} = -0.2637$

Scatter Plot:



For  $k=7$

$R^2\_score = -1.0253$

Scatter Plot:

