Graded Assignment - 11 (PART - A)

The due date for submitting this assignment has passed.
Due on 2024-04-17, 23:59 IST.
You may submit any number of times before the due date. The final submission will be considered for grading.

You have last submitted on: 2024-04-17, 13:47 IST

Data Set Information:

Live selling is becoming increasingly popular in Asian countries. Small vendors can now reach a wider audience and connect with many customers. Analyze The variability of consumer engagement on Facebook Live data which can help sellers to build selling approach and activities for the company.

(Consider the statement for Q1- Q8) Load the dataset using following link

Url= "https://archive.ics.uci.edu/ml/machine-learning-databases/00488/Live_20210128.csv"

Check if any feature contains Null values.

Drop all the features which have Null values.

Save 'status_type' as target variable.

Drop the feature "status_id", "status_type" and "status_published" from training set.

Use LabelEncoder to transform the target variable.

Use standard scaler to scale the features.

For Q4,Q5 Train the model using Kmeans clustering (Take Random state=10)

For Q6,Q7,Q8 Train the model using Agglomerative Clustering by setting the parameter as following

```
n_clusters=4,affinity='euclidean', linkage='ward'
```

+ Code +

1) What is the shape of the data? ***1 point***

- (6000,15)
- (6000,16)
- (7050,15)
- (7050,16)

Yes, the answer is correct.
Score: 1

Accepted Answers:

(7050,16)

2) How many feature contain Null values? ***2 points***

- 4
- 8
- 0
- 5

Yes, the answer is correct.
Score: 2

Accepted Answers:

4

3) Column 'status_type' has _ _ _ _ (number) unique values. ***2 points***

- 6
- 5
- 1
- 4

Yes, the answer is correct.
Score: 2

Accepted Answers:

4

4) Enter the inertia score at k=2 ***4 points***

- 482780.09
- 48780.09
- 48278.09
- 482.09

Yes, the answer is correct.
Score: 4

Accepted Answers:

48278.09

5) How many labels were predicted accurately at k=4? ***4 points***

4118

No, the answer is incorrect.
Score: 0

Accepted Answers:

(Type: Numeric) 4421

6) What is the label predicted for first row of samples. ***3 points***

- 0
- 1
- 2
- 3

Yes, the answer is correct.
Score: 3

Accepted Answers:

3

7) Enter the number of leaves in the hierarchical tree.

7050

Yes, the answer is correct.
Score: 2

Accepted Answers:

(Type: Numeric) 7050

2 points

8) What is the accuracy of the model(in Fercentage)?

No, the answer is incorrect.
Score: 0

Accepted Answers:

(Type: Range) 25 , 30

3 points