

Started on Monday, 5 October 2020, 11:30 AM

State Finished

Completed on Monday, 5 October 2020, 11:45 AM

Time taken 14 mins 27 secs

Marks 0.00/40.00

Grade 0.00 out of 10.00 (0%)

Question **1**

Incorrect

Mark 0.00 out of
5.00

Given the following frequent itemsets what candidates will Apriori compute for the next database scan?

AB, AC, AD, BC, BD, CD, AE

Select one:

- ☐ a. ABC, ABD, ACD, BCD, ABCD
- ☒ b. ABC, ABD, ACD, BCD, ABE, ACE, ADE, BCD, ABCD ✖
- ☐ c. ABC, ABD, ACD, BCD
- ☐ d. Null-set
- ☐ e. ABC, ABD, ACD, BCD, ABE, ACE, ADE, BCD

Your answer is incorrect.

The correct answer is: ABC, ABD, ACD, BCD

Question 2

Incorrect

Mark 0.00 out of
10.00

If we run ID3, what is the information gain of each attribute in the first level? Write upto 3 decimal places

Example#	Colour	Type	Origin	Stolen?
1	Red	Sports	Domestic	Yes
2	Red	Sports	Domestic	No
3	Red	Sports	Domestic	Yes
4	Yellow	Sports	Domestic	No
5	Yellow	Sports	Imported	Yes
6	Yellow	SUV	Imported	No
7	Yellow	SUV	Imported	Yes
8	Yellow	SUV	Domestic	No
9	Red	SUV	Imported	No
10	Red	Sports	Imported	Yes

(A) Example#:

One possible correct answer is: 1

(B) Colour:

One possible correct answer is: 2

(C) Type:

One possible correct answer is: 1

(D) Origin:

One possible correct answer is: 1

(E) Entropy at level 1 is:

One possible correct answer is: 1

Your answer is incorrect.

Question 3

Not answered

Marked out of 5.00

Use naive bayes on the following data to classify Red Domestic SUV.

Example#	Colour	Type	Origin	Stolen?
1	Red	Sports	Domestic	Yes
2	Red	Sports	Domestic	No
3	Red	Sports	Domestic	Yes
4	Yellow	Sports	Domestic	No
5	Yellow	Sports	Imported	Yes
6	Yellow	SUV	Imported	No
7	Yellow	SUV	Imported	Yes
8	Yellow	SUV	Domestic	No
9	Red	SUV	Imported	No
10	Red	Sports	Imported	Yes

What is $P(\text{Red Domestic SUV} \mid \text{Stolen})$ as computed in naive bayes? (upto 3 decimal places)



The correct answer is: 0.037

Question 4

Not answered

Marked out of 5.00

Data: $\{(Ram, 64, 60), (Shyam, 60, 61), (Gita, 59, 70), (Mohan, 68, 71)\}$. Run 2 iterations of k-means algorithm using euclidean distance and $k=2$. Choose Shyam and Gita as initial means. After 2 iterations, the clustering quality (upto 3 decimal places) is:

Answer:



The correct answer is: 2

Question 5

Not answered

Marked out of 5.00

Given the following frequent itemsets what candidates will Apriori compute for the next database scan?

ABC, ABD, ACD, BCD, BCE, CDE

Select one:

- ☐ a. ABCD, BCDE, ACDE
- ☐ b. ABCD
- ☐ c. ABCD, BCDE
- ☐ d. ABCD, BCDE, ACDE, ABCDE
- ☐ e. Null-set

Your answer is incorrect.

The correct answer is: ABCD, BCDE, ACDE

Question 6

Not answered

Marked out of 5.00

Data: {(Ram,64,60),(Shyam,60,61),(Gita,59,70),(Mohan,68,71)}. Run 2 iterations of k-means algorithm using euclidean distance and k=2. Choose Shyam and Gita as initial means. Chose the clusters formed after two iterations. Abbreviations : Ram - R, Shyam -S, Gita - G, Mohan -M.

Select one:

- ☐ a. Cluster 1 - (R) , Cluster 2 - (S,G,M)
- ☐ b. Cluster 1 - (R,G) , Cluster 2 - (S,M)
- ☐ c. Cluster 1 - (R,S,M) , Cluster 2 - (G)
- ☐ d. Cluster 1 - (R,S) , Cluster 2 - (G,M)
- ☐ e. Cluster 1 - (R,G,M) , Cluster 2 - (S)
- ☐ f. Cluster 1 - (R,S,G) , Cluster 2 - (M)
- ☐ g. Cluster 1 - (R,S,G,M) , Cluster 2 - ()

Your answer is incorrect.

The correct answer is: Cluster 1 - (R,S) , Cluster 2 - (G,M)


Question 7

Not answered

Marked out of 5.00

Use naive bayes on the following data to classify Red Domestic SUV.

Example#	Colour	Type	Origin	Stolen?
1	Red	Sports	Domestic	Yes
2	Red	Sports	Domestic	No
3	Red	Sports	Domestic	Yes
4	Yellow	Sports	Domestic	No
5	Yellow	Sports	Imported	Yes
6	Yellow	SUV	Imported	No
7	Yellow	SUV	Imported	Yes
8	Yellow	SUV	Domestic	No
9	Red	SUV	Imported	No
10	Red	Sports	Imported	Yes

What is $P(\text{Red Domestic SUV} \mid \text{Not stolen})$ as computed in naive bayes? (upto 3 decimal places)  .

The correct answer is: 0.069