

## DMW BodhiTree MCQs

Value of pearson coefficient ranges between-

**Answer**

-1 to +1

What if pearson coefficient value is between marks and sports attributes is 0.9?

**Answer**

Positively Related

What can be the value of pearson's coefficient? Select ALL correct options.

**Answer**

“+1”, “0”, “-0.6”

If I debit my account with Rs. 5000/- then which of the bank's database is updated?

**Answer**

“Bank's Operational Database”

Which of the following are the subjects?

**Answer**

“Student”, “Teacher”, “Lab”

Which of the following is nonvolatile?

**Answer**

Data warehouse

Write operation can be performed in OLAP

**Answer**

False

Following are the properties of OLAP

**Answer**

“Used by Knowledge workers”, “Complex Query”

6 dimensional data can be viewed as series –

**Answer**

5-D cubes

Data Cube allows data to be viewed in-

**Answer**

Multiple dimensions

Highest level of Summarization called-?

**Answer**

Base

Which data model is used for OLTP? Select ALL correct options.

**Answer**

“Relational”, “ER”, “Network”

Star Schema has a problem of -

**Answer**

Redundancy

Which Schema has multiple dimension tables

**Answer**

“Star”, “Snowflake”, “Fact Constellation”

Which schema has multiple fact tables

**Answer**

“Fact Cons.”

Which Schema is suitable for large enterprise?

**Answer**

Fact Cons.

Which Schema is suitable for data mart?? Select ALL correct options.

**Answer**

“Star”, “Snowflake”

Identify the correct option about data warehouse data.

**Answer**

“Data Warehouse contains detail as well as summarized data.”

What type of attributes help to store aggregate data in data cube?

**Answer**

“Measurable attributes in fact table”

Data Cube is the Graphical representation of the \_\_\_\_

**Answer**

“Fact Table”

In the multidimensional model, the records are organized into various dimensions, and each dimension includes multiple levels of abstraction described by \_\_\_\_

**Answer**

“Concept Hierarchy”

Identify the correct order of concept Hierarchy

**Answer**

“street < city < province\_or\_state < country.”

How many types of Data warehouse Architecture

**Answer**

“3”

What is the purpose of Staging Area in DWA ?

**Answer**

“To Process raw data before storing in warehouse”

How many maximum Components can be their in data warehouse Architecture ?

**Answer**

“5”

Which are the components of bottom tier of DWH multitier architecture ?

**Answer**

“Metadata repository, datawarehouse server and data marts”

What is advantage of ROLAP ?

**Answer**

“Scalability”

Benifits of MOLAP ?

**Answer**

“Faster Computation”

What are components of middle tier of DWH multitier architecture?

**Answer**

OLAP servers

Types of OLAP servers?

**Answer**

“ROLAP”, “MOLAP”, “HOLAP”

Which is 5th Step of data warehouse design Process?

**Answer**

“Online Analytic Processing (OLAP) Cube”

Primary physical environments are—

**Answer**

“Development, testing, and production”

OLAP cubes help to organize

**Answer**

“Data in a multi-dimensional format”

Requirements Gathering stage should focus on?

**Answer**

Aligning department goals with the overall project

Three most popular data models for warehouses are:

**Answer**

“Snowflake Schema”, “Star Schema”, “Galaxy Schema”

Similarity values always range from [0, 1]

**Answer**

“TRUE”

Fill the correct option about symmetry property of similarity.  $s(p, q) = ?$  for all  $p$  and  $q$ .

**Answer**

“ $s(q, p)$ ”

Select correct example of symmetric binary attribute

**Answer**

Gender: Male, Female

Select correct example of Asymmetric binary attribute

**Answer**

“Student Result: Pass, Fail”

Identify the correct example of Nominal Attributes.

**Answer**

“Income categories - HIGH, MEDIUM, LOW”

Consider the two objects  $i$  and  $j$  with nominal attributes, the dissimilarity between these objects are calculated using below equation:  $d(i, j) = (p - m) / p$ . In this formula what  $p$  and  $m$  represents?

**Answer**

$m$  is the number of matches  $p$  is the total number of variables/features

When objects are represented using single attribute, the proximity value 1 indicates :

**Answer**

“Objects are similar”

Identify the name of the table used for measuring similarity between objects represented using 2 or more binary attributes.

**Answer**

“Contingency Table”

Gender is the example of Asymmetric Binary Attribute.

**Answer**

“FALSE”

Identify correct equation of Jaccard Coefficient

**Answer**

“ $J = \frac{f_{11}}{f_{01} + f_{10} + f_{11}}$ ”

In the equation of Minkowski Distance, what is the set of values of r parameter?

**Answer**

“[1, 2, infinity]”

What equation we get when r parameter = 2 in Minkowski Distance formula.

**Answer**

“Euclidean distance”

Find the Manhattan distance between the given objects represented using single attribute.  
Employee1(56) Employee2(60)

**Answer**

“4”



Distance matrix is square matrix

**Answer**

“FALSE”

Find the Euclidean distance between objects X and Y.  $X = (6,4)$   $Y = (2,7)$

**Answer**

“5”

Transactions containing x and y / total transactions?

**Answer**

support formula

Transactions containing x and y / transactions contain x?

**Answer**

confidence formula

What is differential market basket analysis?

**Answer**

Comparison will results between different stores, between customers

Maximal Itemset is -

**Answer**

“An itemset is maximal frequent if none of its supersets are frequent.”

Closed Itemset

**Answer**

“An itemset is closed if none of its immediate supersets have same support count same as Itemset”

Apriori Algorithm use -

**Answer**

“Iterative approach”

Minimum support is 75% for 4 transaction database means values is

**Answer**

“3”

Apriori algorithm final output will be

**Answer**

“Association rules”

Collabrative filtering used for

**Answer**

“Recommendation”

Lift is

**Answer**

“Increase in sell of one item if will sell other item”

Limitation of Apriori

**Answer**

“Algorithm scans the database too many times”

**Answer Description**

Algorithm scans all items only once

Which of the following is direct application of frequent itemset mining??

**Answer**

Market Basket Analysis

FP growth is

**Answer**

“Frequent Pattern Growth Algorithm”

A Frequent Pattern set is built which will contain

**Answer**

“All the elements whose frequency is greater than or equal to the minimum support”

Root node for FP tree is always

**Answer**

“null”

What does FP growth algorithm do??

**Answer**

It mines all frequent patterns by constructing a FP tree

Which of the following is true?

**Answer**

Both apriori and FP-Growth uses horizontal data format

Rules at abstract level are more stronger than rules at specific level

**Answer**

Yes

In reduced support multi level association rules category support at more abstract level is reduced than more specific levels

**Answer**

No

Supervised learning takes input as unlabeled data

**Answer**

False

Regression is kind of Supervised Learning

**Answer**

Yes

Decision Tree is a kind of -

**Answer**

Supervised Learning

In Decision Tree, Attributes can be at leaf nodes

**Answer**

No

Which of the following is not the stopping criteria in DT induction? All samples for a given node belong to the same class There are no remaining attributes for further partitioning There are no samples left

**Answer**

All above

KNN is called Lazy Learner Because\_\_\_\_\_

**Answer**

“Solution is provided at the query time”

KNN algorithm works with numerical data

**Answer**

“TRUE”

KNN is example of \_\_\_\_ technique

**Answer**

“Supervised”

Associative classifier is combination of \_\_\_\_ and \_\_\_\_

**Answer**

“Association Rule mining , Classification”

Association Rule mining , Selects Rules with right side is \_\_\_\_

**Answer**

“Class Label”

Case Based Reasoning is called Lazy Learner Because\_\_\_\_\_

**Answer**

“little work is done offline, and all of the work is performed at query time.”

According to Aamodt and Plaza , the CBR working cycle comprising of which four R's :

**Answer**

“RETRIEVE REUSE REVISE RETAIN”

Entropy Value ranges between

**Answer**

0 to 1

If three class data set contains the  $\frac{1}{3}$  records of each of the three class the this dataset has the -

**Answer**

“Highest impurity”, “1”

Attribute with highest Information Gain is choosen as a root node

**Answer**

True

Validation Dataset is also called as.....

**Answer**

“Testing dataset”

\_\_\_\_\_ method is more suitable when dataset is small

**Answer**

“K-Fold cross validation”

The Accuracy of model is better in K-fold cross validation method as compare to Hold out method

**Answer**

“TRUE”

Categorization of all cities in a country into different groups based on their similarity is an example of -

**Answer**

UnSupervised Learning

Categorization of Cities in a country into Metro City and Non Metro City is an example of-

**Answer**

Supervised Learning

Development of Driverless Car is more suited to-

**Answer**

Reinforcement Learning

One vs One Multiclass Strategy does

**Answer**

$n(n-1)/2$  Comparisons

Complexity of One vs All Multiclass strategy is

**Answer**

$O(n)$

Multiple Regression has -

**Answer**

Multiple input and multiple output variables

Output of Regression is -

**Answer**

Numeric

In n-fold cross validation for Dataset with  $p$  records, the maximum value of  $n$  can be-

**Answer**

$p$

The number of iterations in apriori \_\_\_\_

**Answer**

increases with the size of the maximum frequent set



Frequent item sets is

**Answer**

Superset of both closed frequent item sets and maximal frequent item sets

Ashley George