NAME:- AFNAN ATTAR PRN:- F191112003 CLASS:- BE COMP II
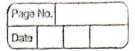SUBJECT:- BI ASSIGNMENT No:- 03

Q1) What do you understand by cube?

Ans 1. An OLAP cube is a data structure that overcomes the limitations of relational databases by providing rapid analysis of data.

2. Cubes can display and sum large amounts of data while also providing users with searchable access to any data points.

3. This way, the data can be rolled up, sliced and diced as needed to handle the west/widest variety of questions that are relevant to a user's state of interest.

4. IT developers with a working knowledge of OLAP cubes can create management packs to define their own extensible and customizable OLAP cubes that are built on the data warehouse infrastructure.

5. These cubes are stored in SQL Services Analysis Services [SSAS].

Q2) Explain about MOLAP?

Ans 1. Classif form of OLAP is known as MOLAP and often called as OLAP.

2. Simple databases structure such as time, period, product, location, etc. are used.

3. Functioning of each and every dimensions or data structure is defined by one or more hierarchies.

Q3) Explain about ROLAP?

Ans 1. Functioning of ROLAP occurs simultaneously with

relational databases.

2. Data and tables are stored as relational tables.
3. To hold new information or data new tables are created.
4. Functioning of ROLAP depends upon specialized schema design.

Q4. Explain about ROLAP Hybrid:? ~~what is hybrid~~

Ans 1. When a database developer uses Hybrid OLAP it divides the data between relational and specialized storage.

2. In some particular modifications a HOLAP database may store huge amounts of data in its relational tables.

3. Specialized data storage is used to store data which is less detailed and more aggregate.

Q5. Explain difference between MOLAP and ROLAP?

ROLAP	MOLAP
1. Stands for relational online analytical processing.	Stands for multidimensional online analytical processing.
2. Used for large data volumes.	Used for limited data volumes.
3. Access is slow.	Access is fast.
4. Data stored in relational tables	Data stored in multidimensional cubes.
5. Data is fetched from data warehouse.	Data is fetched from MDDBs database.
6. In ROLAP, complicated SQL queries are used.	Here sparse matrix is used.
7. Static multidimensional view of data is created.	Dynamic multidimensional view of data is created.

NAME :- AFNAN ATTAR   PRN : F19112003   CLASS :- BE COMP II

SUBJECT :- BI   ASSIGNMENT No. :- 4

Q1) What is pivot table?

Ans 1.   A pivot table is a tool that allows us to summarize and analyze data in spreadsheet or database.

2.   You can use pivot tables to group data, calculate, average or totals, and create charts and graphs.

3.   For typical data entry and storage, data usually appears in flat types, meaning that they consists of only columns and rows.

4.   Excel pivot tables include the features to directly query an online analytical processing (OLAP) server for retrieving data instead of getting data from an excel spreadsheet.

Q2) What are some ways to rearrange data within a pivot table?

Ans   There are few ways to rearrange data within a pivot table including :-

1)   Change the order of fields that we are using.

2)   Change the way data is being summarized.

3)   Change the way the data is being filtered.

Q3) What is a page field in context with pivot tables?

Ans 1.   A page field is a field in pivot table that you can use to filter the data in the table.

2.   For example, if you have a pivot table that contains data on different countries, you could use a page field to filter the table so the only data on one particular country is shown.

Q4) What are the advantages of using a pivot chart over a regular chart?

Ans 1. Pivot charts offer a number of advantages over regular charts, chief among them being that they are far more flexible and customizable.

2. With a regular chart, you are limited to the data that is already present in the chart.

3. With a pivot chart we can easily change the data that is being used to generate the chart, without having to recreate the entire chart from scratch.

4. This makes pivots charts more versatile and useful for data analytics.

Q5) How is a pivot table different from a summary table?

Ans 1. A pivot table is a type of summary table that allows you to recognize and summarize data in a flexible way.

2. With a pivot table, we can choose which columns and rows to include in your summary, and you can also choose how to summarize data.

3. For example, you could use a pivot table to sum data by month, or you could use a pivot table to calculate the average price of a product by category.

4. A summary table, on the other hand, is a static table that shows a summary of data from a larger data set.

5. Summary tables are typically used to show things like totals and averages, and they cannot do customization the way pivot tables can.