1.Explain various Difference between SQL & NoSQL DBs ?

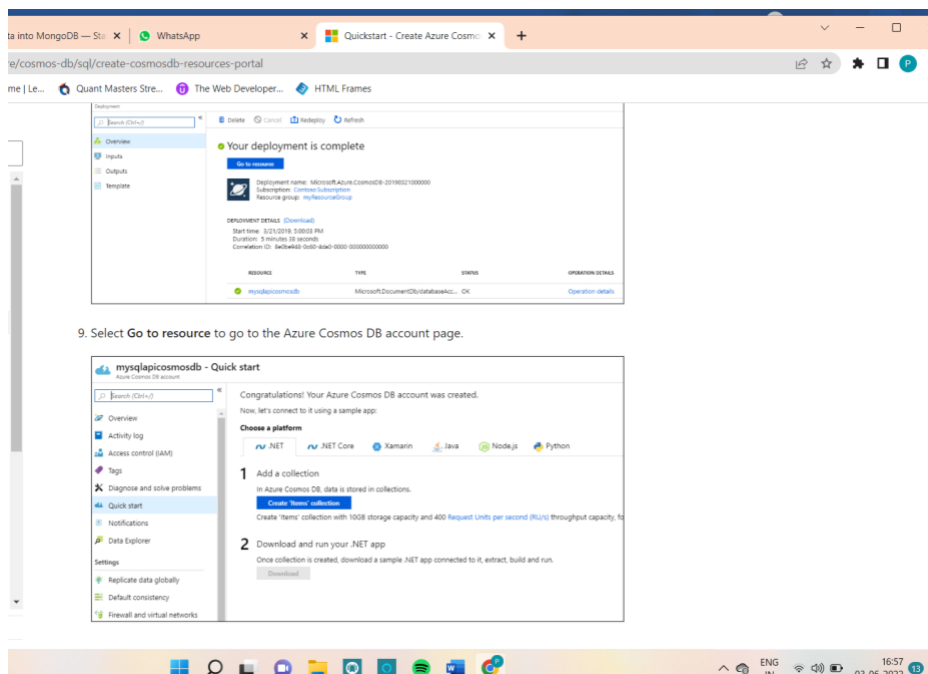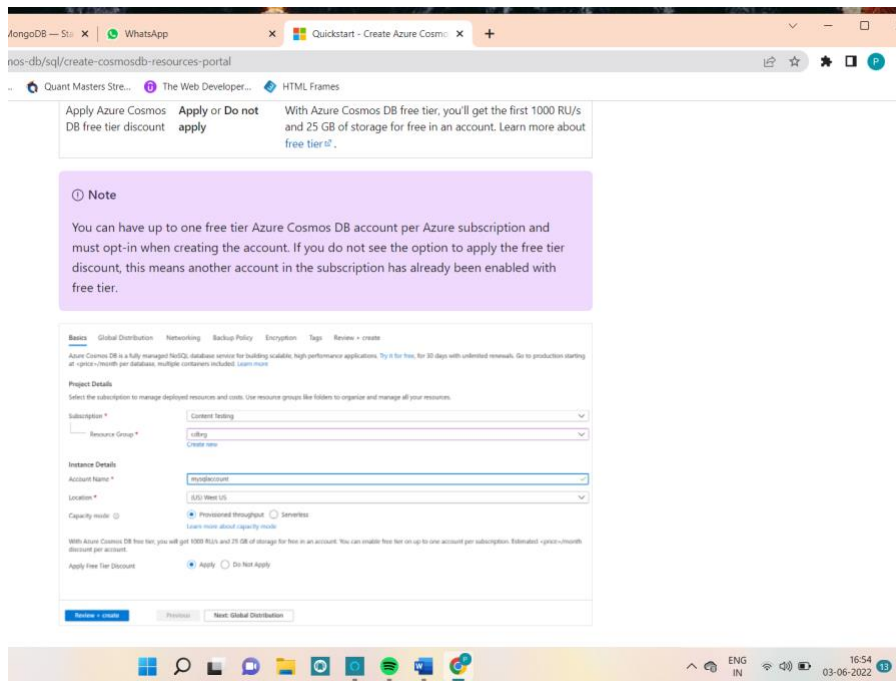| SQL	NO-SQL
It is nothing but RDBMS	Here there is no any relation between database
Have a fixed Schema	Have dynamic schema
Very scalable	Dynamic scalable
Not suited for hierarical data storage	Best suitable for hierarical data storage
Vertically Scalable	Horizantally scalable
Follows ACID Property	Follows only CAP
EX:-MYSQL,Oracle etc	EX:-Mongo DB,Big table

2.Explain advantages of NoSQL DBs ? Explain how MongoDB data will be inserted ?
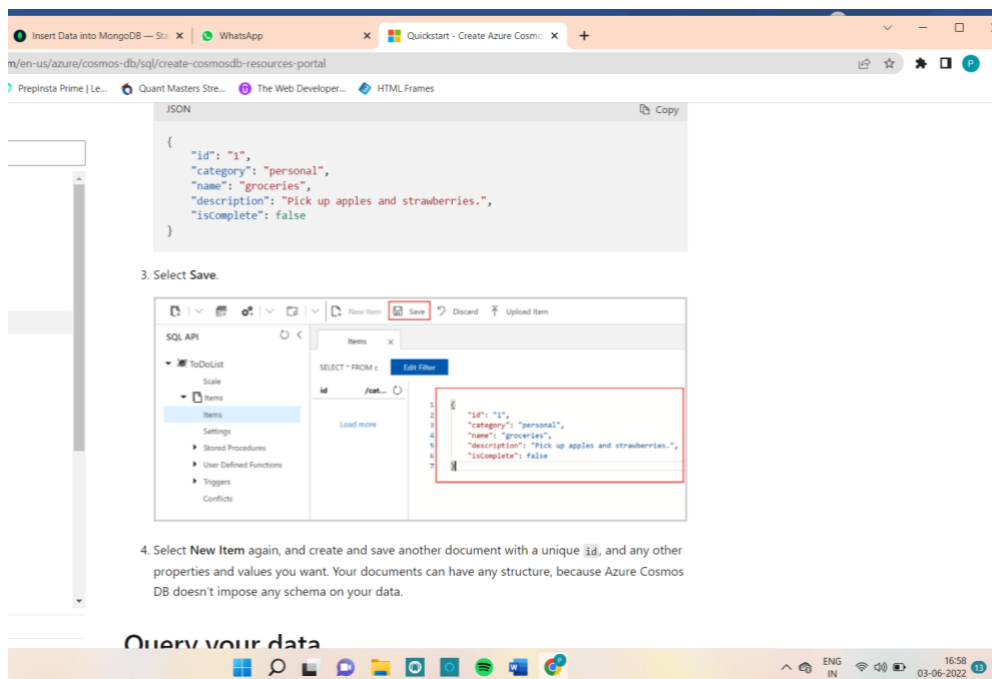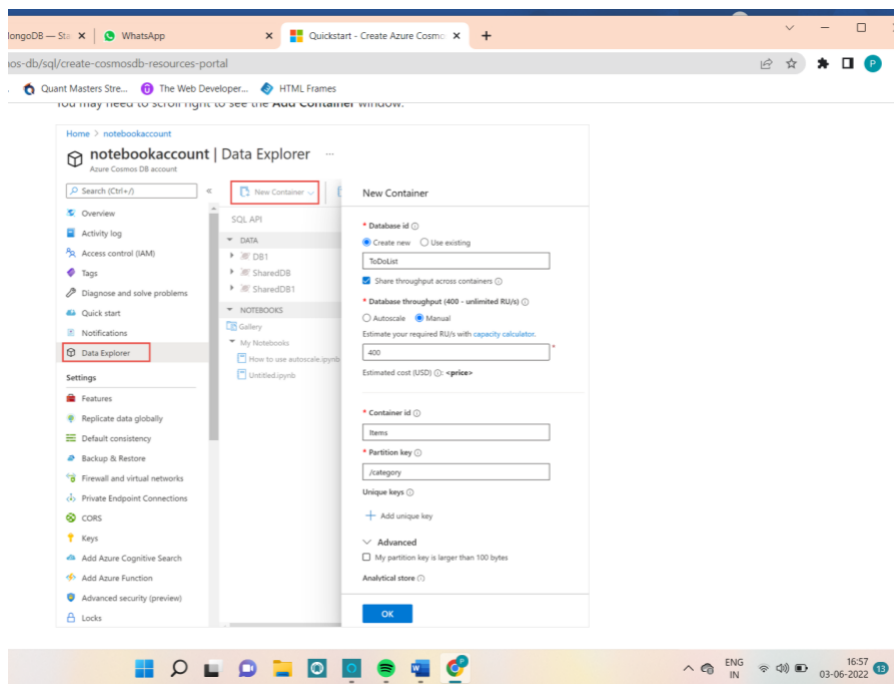
*Flexibility. With SQL databases, data is stored in a much more rigid

*Scalability. Instead of scaling up by adding more server

*High performance

*Availability

*Highly Functional

//Data Types
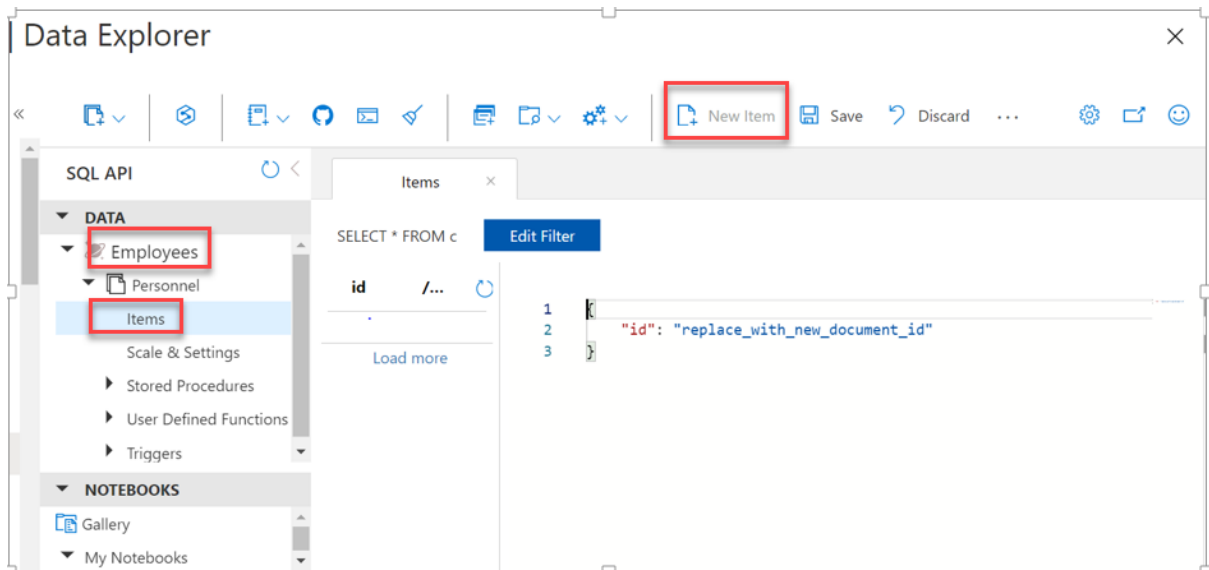
{

string: "String of text",

int: 405,

double: 3.565,

boolean: true,

array: [1, 2, 3],

object: (attri: "attri", attr2: "attr2"},

date: new Date("<YYYY-mm-dd>"),

object id: <objectId>,

no_value: null

}

3.Explain the steps - how COSMOS DB can be creatd with screens ?

4. Explain how to write JSON query in COSMOS DB ?
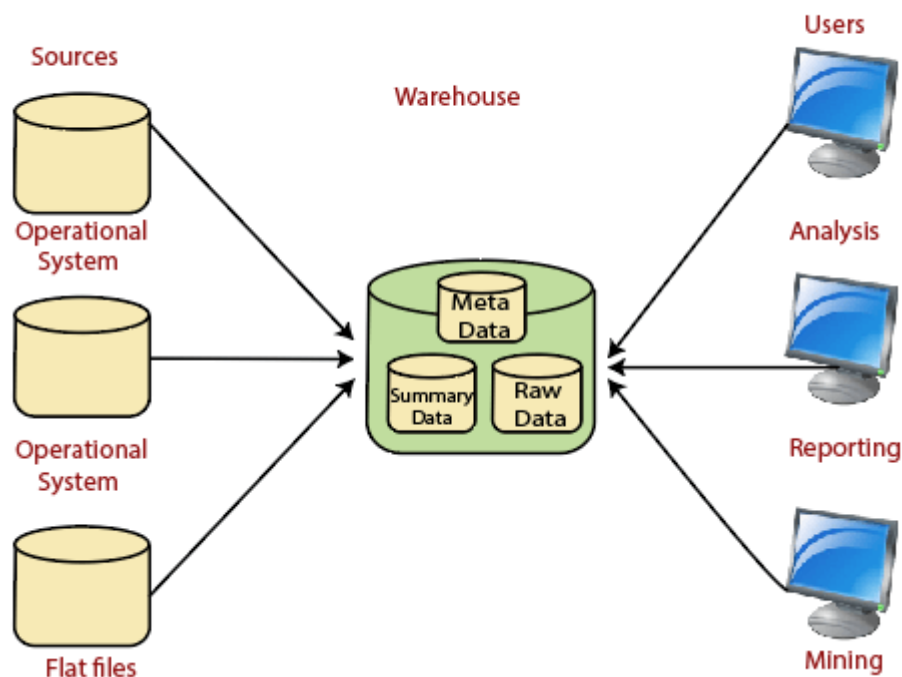
5. Explain major difference between databases & datawarehouses ?

Database	Data warehouse
Offers a security of data	Users to crititcal access of data
Use same data for multiple applications	Here integrate many resourses of data
High level of protection	Analysis and reporting
Single user can access same data at a time	It saves user time to access data

6. Explain the architecture of datawarehouses ?

Architecture of a Data Warehouse

7. Explain what are Datamarts & how different from DATABASES ?
& mention the types of Datamarts too.

DATA MARTS:-It is smaller version of database

TYPES:-

1,Dependent datamarts

2.Independant datamarts

3.Hybrid datamarts

8. Explain OLAP & OLTP with examples ?

OLTP	OLAP
Contains current data	Contains historical data
Useful in the running the business	Useful in analyzing the data
E-R model	Snowflake
Primitive highly detailed data	Provides summarized data
Ex- All bank transactions made by a customer is under OLAP	Ex-Bank transactions made by a customer at a particular time

9. Explain what is BI & how BI helps business to take intelligent decisions ?

    ----→It is the activity which contributes the growth of the company

 *BI is nothing but transforming the row

 *It is based on the data ware house technology.

*Here the data is transformed and loaded into data warehouses

*Data is creditable and is used

10.Explain how ETL works with Datawarehouses ?

----→ETL process collects and refines different types of data, then delivers the data to a data lake or data warehouse such as Redshift, Azure, or BigQuery.

----→ Instead of transforming the data before it's written, ELT takes advantage of the target system to do the data transformation.