

1	a	<p>For the relation schema given below, insert atleast 3 tuples for each table and answer the following queries using SQL.</p> <p>EMPLOYEE (<u>employee-name</u>, street, city)</p> <p>WORKS (<u>employee-name</u>, <u>company-name</u>, salary)</p> <p>COMPANY (<u>company-name</u>, city)</p> <p>MANAGES (<u>employee-name</u>, <u>manager-name</u>)</p> <ol style="list-style-type: none"> Find the names, street address, and cities of residence for all employees who work for 'First Bank Corporation' and earn more than \$10,000. Find the names of all employees in the database who live in the same cities as the companies for which they work.
	b	<p>Consider the following restaurant database with the following attributes - Name, address (building, street, area, pincode), id, cuisine, nearby landmarks, online delivery- yes/no, famous for (name of the dish). Create 5 collections with data relevant to the following questions. Write and execute the following Queries using MongoDB</p> <ol style="list-style-type: none"> List the name and address of all restaurants in Bangalore with Italian cuisine List the name, address and nearby landmarks of all restaurants in Bangalore where north Indian thali is available
2	a	<p>For the relation schema given below, insert atleast 3 tuples for each table and answer the following queries using SQL.</p> <p>EMPLOYEE (<u>employee-name</u>, street, city)</p> <p>WORKS (<u>employee-name</u>, <u>company-name</u>, salary)</p> <p>COMPANY (<u>company-name</u>, city)</p> <p>MANAGES (<u>employee-name</u>, <u>manager-name</u>)</p> <ol style="list-style-type: none"> Find the names of all employees in the database who do not work for 'First Bank Corporation' Find the names of all employees in the database who earn more than every employee of 'Small Bank Corporation'. Assume that all people work for at most one company.
	b	<p>Consider the following restaurant database with the following attributes - Name, address (building, street, area, pincode), id, cuisine, nearby landmarks, online delivery- yes/no, famous for (name of the dish). Create 5 collections with data relevant to the following questions. Write and execute the following Queries using MongoDB</p> <ol style="list-style-type: none"> List the name, address and nearby landmarks of all restaurants in Bangalore where north Indian thali is available List the name and address of restaurants and also the dish the restaurant is famous for, in Bangalore.

3	a	<p>For the relation schema given below, insert atleast 3 tuples for each table and answer the following queries using SQL.</p> <p>CUSTOMER (<u>cust-no</u>, cname, city)</p> <p>ORDER (<u>order-no</u>, order-date, cust-no, order-amount)</p> <p>ORDER – ITEM (<u>order-no</u>, <u>Item-no</u>, quantity)</p> <p>ITEM (<u>item-no</u>, unit-price)</p> <p>SHIPMENT (<u>order-no</u>, <u>warehouse-no</u>, ship-date)</p> <p>WAREHOUSE (<u>warehouse-no</u>, city)</p> <ol style="list-style-type: none"> 1. List the no. of order placed by customer no. 5 2. List the no. of orders placed by each customer
	b	<p>Consider the following restaurant database with the following attributes - Name, address (building, street, area, pincode), id, cuisine, nearby landmarks, online delivery- yes/no, famous for (name of the dish). Create 5 collections with data relevant to the following questions. Write and execute the following Queries using MongoDB</p> <ol style="list-style-type: none"> 1. List the name, address and nearby landmarks of all restaurants in Bangalore where north Indian thali is available. 2. List the name and address of restaurants and also the dish the restaurant is famous for, in Bangalore where online delivery is available.
4	a	<p>For the relation schema given below, insert atleast 3 tuples for each table and answer the following queries using SQL.</p> <p>CUSTOMER (<u>cust-no</u>, cname, city)</p> <p>ORDER (<u>order-no</u>, order-date, cust-no, order-amount)</p> <p>ORDER – ITEM (<u>order-no</u>, <u>Item-no</u>, quantity)</p> <p>ITEM (<u>item-no</u>, unit-price)</p> <p>SHIPMENT (<u>order-no</u>, <u>warehouse-no</u>, ship-date)</p> <p>WAREHOUSE (<u>warehouse-no</u>, city)</p> <ol style="list-style-type: none"> 1. List item nos and its quantity of order no. 5. 2. List customer details who has the largest order amount.
	b	<p>Consider the following Tourist_places table with the following attributes – Place, address (state), id, tourist attractions, best time of the year to visit, modes of transport (include nearest airport, railway station etc), accommodation, food - what not to miss for sure. Create 5 collections with data relevant to the following questions. Write and execute the following Queries using MongoDB</p> <ol style="list-style-type: none"> 1. List all the tourist places of Karnataka 2. List the tourist attractions of Karnataka. Exclude accommodation and food

5	a	<p>For the relation schema given below, insert atleast 3 tuples for each table and answer the following queries using SQL.</p> <p>CUSTOMER (<u>cust-no</u>, cname, city)</p> <p>ORDER (<u>order-no</u>, order-date, cust-no, order-amount)</p> <p>ORDER – ITEM (<u>order-no</u>, <u>Item-no</u>, quantity)</p> <p>ITEM (<u>item-no</u>, unit-price)</p> <p>SHIPMENT (<u>order-no</u>, <u>warehouse-no</u>, ship-date)</p> <p>WAREHOUSE (<u>warehouse-no</u>, city)</p> <ol style="list-style-type: none"> 1. List the average order amount for the current year. 2. List customer details who has the largest order amount
	b	<p>Consider the following Tourist_places table with the following attributes –</p> <p>Place, address (state), id, tourist attractions, best time of the year to visit, modes of transport (include nearest airport, railway station etc), accommodation, food - what not to miss for sure. Create 5 collections with data relevant to the following questions. Write and execute the following Queries using MongoDB</p> <ol style="list-style-type: none"> 1. List the tourist attractions of Karnataka. Exclude accommodation and food. 2. List the places sorted state wise.
6	a	<p>For the relation schema given below, insert atleast 3 tuples for each table and answer the following queries using SQL.</p> <p>CUSTOMER (<u>cust-no</u>, cname, city)</p> <p>ORDER (<u>order-no</u>, order-date, cust-no, order-amount)</p> <p>ORDER – ITEM (<u>order-no</u>, <u>Item-no</u>, quantity)</p> <p>ITEM (<u>item-no</u>, unit-price)</p> <p>SHIPMENT (<u>order-no</u>, <u>warehouse-no</u>, ship-date)</p> <p>WAREHOUSE (<u>warehouse-no</u>, city)</p> <ol style="list-style-type: none"> 1. List the customer names who have not ordered for item no. 10. 2. List the names of customers who have ordered at least 10 items.
	b	<p>Consider the following Movie table with the following attributes -</p> <p>Actor_name, Actor_id, Actor_birthdate, Director_name, Director_id, Director_birthdate, film_title, year of production, type (thriller, comedy, etc.) Create 5 collections with data relevant to the following questions. Write and execute the following Queries using MongoDB</p> <ol style="list-style-type: none"> 1. List all the movies acted by John in the year 2018 2. List only the actor's names and type of the movie directed by Ram

7	a	<p>For the relation schema given below, insert atleast 3 tuples for each table and answer the following queries using SQL.</p> <p>BRANCH (<u>branch-name</u>,branch-city,assets) CUSTOMER (<u>customer-name</u>,customer-street,customer-city) ACCOUNT (<u>account-number</u>,branch-name,balance) LOAN (<u>loan-number</u>,branch-name,amount) DEPOSITOR (<u>customer-name</u>,<u>account-number</u>) BORROWER (<u>customer-name</u>,<u>loan-number</u>) EMPLOYEE (<u>employee-name</u>,<u>branch-name</u>,salary)</p> <ol style="list-style-type: none"> 1. Find all account whose balance is less than 500. 2. Calculate the average salary of all employees and show the average salary as “avg_salary”
	b	<p>Consider the following restaurant database with the following attributes - Name, address (building, street, area, pincode), id, cuisine, nearby landmarks, online delivery- yes/no, famous for (name of the dish). Create 5 collections with data relevant to the following questions. Write and execute the following Queries using MongoDB</p> <ol style="list-style-type: none"> 1. List the name, address and nearby landmarks of all restaurants in Bangalore where north Indian thali is available. 2. List the name and address of restaurants and also the dish the restaurant is famous for, in Bangalore where online delivery is available.
8	a	<p>For the relation schema given below, insert atleast 3 tuples for each table and answer the following queries using SQL.</p> <p>BRANCH (<u>branch-name</u>,branch-city,assets) CUSTOMER (<u>customer-name</u>,customer-street,customer-city) ACCOUNT (<u>account-number</u>,branch-name,balance) LOAN (<u>loan-number</u>,branch-name,amount) DEPOSITOR (<u>customer-name</u>,<u>account-number</u>) BORROWER (<u>customer-name</u>,<u>loan-number</u>) EMPLOYEE (<u>employee-name</u>,<u>branch-name</u>,salary)</p> <ol style="list-style-type: none"> 1. Find all name of customers whose city is Brooklyn 2. Find all employees whose salary is greater than 1400 and working branch is not ‘Downtown’
	b	<p>Consider the following restaurant database with the following attributes - Name, address (building, street, area, pincode), id, cuisine, nearby landmarks, online delivery- yes/no, famous for (name of the dish). Create 5 collections with data relevant to the following questions. Write and execute the following Queries using MongoDB</p> <ol style="list-style-type: none"> 1. List the name, address and nearby landmarks of all restaurants in Bangalore where south Indian thali is available 2. List the name and address of restaurants and also the dish the restaurant is famous for, in Bangalore.

9	a	<p>For the relation schema given below, insert atleast 3 tuples for each table and answer the following queries using SQL.</p> <p>EMPLOYEE (<u>employee-name</u>, street, city)</p> <p>WORKS (<u>employee-name</u>, <u>company-name</u>, salary)</p> <p>COMPANY (<u>company-name</u>, city)</p> <p>MANAGES (<u>employee-name</u>, <u>manager-name</u>)</p> <ol style="list-style-type: none"> 1. Find the names, street address, and cities of residence for all employees who work for 'First Bank Corporation' and earn more than \$10,000. 2. Find the names of all employees in the database who live in the same cities as the companies for which they work.
	b	<p>Consider the following Tourist_places table with the following attributes –</p> <p>Place, address (state), id, tourist attractions, best time of the year to visit, modes of transport (include nearest airport, railway station etc), accommodation, food - what not to miss for sure. Create 5 collections with data relevant to the following questions. Write and execute the following Queries using MongoDB</p> <ol style="list-style-type: none"> 1. List the tourist attractions of Karnataka. Exclude accommodation and food. 2. List the places sorted state wise.
10	a	<p>For the relation schema given below, insert atleast 3 tuples for each table and answer the following queries using SQL.</p> <p>BRANCH (<u>branch-name</u>,branch-city,assets)</p> <p>CUSTOMER (<u>customer-name</u>,customer-street,customer-city)</p> <p>ACCOUNT (<u>account-number</u>,branch-name,balance)</p> <p>LOAN (<u>loan-number</u>,branch-name,amount)</p> <p>DEPOSITOR (<u>customer-name</u>,<u>account-number</u>)</p> <p>BORROWER (<u>customer-name</u>,<u>loan-number</u>)</p> <p>EMPLOYEE (<u>employee-name</u>,<u>branch-name</u>,salary)</p> <ol style="list-style-type: none"> 1. Find all account whose balance is less than 500. 2. Calculate the average salary of all employees and show the average salary as “avg_salary”
	b	<p>Consider the following Movie table with the following attributes -</p> <p>Actor_name, Actor_id, Actor_birthdate, Director_name, Director_id, Director_birthdate, film_title, year of production, type (thriller, comedy, etc.) Create 5 collections with data relevant to the following questions. Write and execute the following Queries using MongoDB</p> <ol style="list-style-type: none"> 1. List all the movies acted by John in the year 2018 2. List only the actor’s names and type of the movie directed by Ram