Intro To DBMS

Q.1 . Data can be used to make decisions only if:

Ans:It can be processed into information

Q.2.. Which of the following is Data:

Ans: All of the above

Q.3.. Anything which stores only unstructured data can be called a Database.

Ans: false

Q.4.. Which of the following is not True:

Ans: (A)

Q.5: Which of the following is the purpose of DBMS:

Ans:(d)

Q.6.. File based systems faces data integrity issues because:

Ans:(c)

Q.7.. What does same data being saved in multiple locations called

Ans : b

Q.8.. In File based systems it is easy to maintain concurrency control when multiple users are updating the same file.

Ans: b

Q.9.. File System in which each teacher of a college is maintaining their separate files concerning the same subjects taught in the course would lead to

Ans: b

Q.10.. If your laptop has the application like MS Access which is fetching data from some other system then it is an example of which type of architecture :

Ans: b

Q.11: In a software architecture which of the following is responsible for computing the result and returning it:

Ans: b

Q.12: What do you mean by Data Sharing in DBMS:

Ans:a

Q.13: What is/are the drawback(s) of using DBMS:

Ans: d

Data Model

Q.1.. Which of the following statements are correct regarding the data models?

Ans: d

Q.2. When asked to design a high level conceptual data model, the very first step is _____.

Ans: c

Q.3. Which one of the following is an example of the object-based logical model?

Ans: a

Q.4.. Which of the following is true for conceptual model:

Ans: c

Q.5. Which of the following model tells how data will be on the disk?

Ans: a

Q.6: Data modelling helps in achieving abstraction in DBMS.

Ans:a

Q.7. Which of the following data models describes the database at the highest level ?

Ans: a

Q.8. Which one of the following is a popular Representational Model?

Ans:b

Q.9. Database schema is part of which design process:

Ans: b

Q.10.. Which of the following shows only the relevant data to users and hides the rest?

ANs: b

Q.11. Which of the following describes the design of a database and the relationship between data ?

Ans: a

Q.12. Which of the following changes whenever we modify any data?

Ans: c

Q.13. Which of the following is/are true with reference to **'view'** in DBMS?
1. A 'view' is a special stored procedure executed when a certain event occurs.
2. A 'view' is a virtual table, which occurs after executing a pre-compiled query.
Ans:b

Q.14: **MCQ - 15**

Send Feedback
Match the following:
Ans:a

ER model

Q.1. ER diagram represents which of the following data models:

Ans:a

Q.3. Why do we use ER diagrams?

Ans: d

Q.5. For an entity Book, which attribute can be made the primary key?

Ans: c

Q.6. Which of the following is true for entity?

Ans: d

Q.7. Any entity which does not has its own primary key is known as:

Ans: d

Q.8. **MCQ - 8 (Weak Entity)**

Ans: a

Q.9: An entity can be:

Ans: d

Q.10: For Library Management System, the Book_code, Book_name, Author_name, Book_price are all an examples of :

Ans: b

Q.11. In a library management system a student can borrow maximum of 3 books in a semester, so in ER diagram the "Book_name" attribute should be represented as :
Ans: c

Q.12 : For the following Student entity, identify the composite attributes:
Ans: c

Q.13: A student can book a maximum of three books but each book can be booked by only one student, so the relationship between student and book is:
Ans: b

Q.14: Which of the following is used to represent the relationship in an E-R diagram:
Ans: c

Q.15: Each student gets only one login ID for the online library system. So, the relationship between student and login ID is:

Ans: d

Q.16: Which of the following is considered best-practices for creating ER Diagram?

Ans: a

Q.17: Which of the following is not true for ER Diagram?

Ans: c

Q.18. Which of the following is a type of abstraction in which entities with relationships come together to form higher level entity?

Ans: c

Q.19. If textbook, magazine, journal, encyclopedia entities are derived from the Book entity , then it is an example of:
Ans: a

Q.20: Which is true for Generalisation:

Ans: b

Q.21: The process of designating sub groupings within the entity set is called as _____.

ANs: a

Q.22: There is a library system, which has a "Category" of "Book". A book *belongs* to a category and a "student" can make an inquiry on a specific "Book" as well as a "Category". It is an example of:

Ans: b

Relational Model

Q.1. Match the ER diagram components to their representation in the relational model

Ans: b

Q.2. In a relational model, which of the following indicates the cardinality:

Ans: c

Q.3. Which of the following is true:

AnS: D

Q.4 For the given relation Book, what is the degree:
Ans: b

Q.5: Which of the following is not a property of the table:

ANs: b

Q.6: Match the components of relational model which are same:
Ans: b

Q.7: There is a set of permitted values for each attribute of a relation. These are known as:
Ans: c

Q.8: A null value of an attribute indicates which of the following:
Ans:d

Q.9: Which of the following is true:

Ans: d

Q.10. A primary key should be:
Ans: d

Q.11. Which of the following is true:
Ans:a

Q.13. What does R refers to in CRUD operations:
Ans: b

Q.14. Entity integrity states that primary key should be:
Ans: b

Q.16. Entity integrity states that primary key should be:
Ans: b

Q.17. For an attribute “Adhaar Number” which is defined as integer type, which constraint would be violated if we enter the PAN (has numbers and alphabets) in it
Ans: c

qQ.18. Which of the following is not a key constraint:
Ans: d

Q.19. Which of the following relational database schemas is a correct representation for the following ER diagram:
Ans: b

Q.20. Relational algebra is :
Ans: c

Q.21. Which of the following is true for selection operator:
ANs: b

Q.22. Which of the following should be used to list down all the names of the Book whose Book_price is less than 100 from the relation 'Book':
Ans: b

Q.23. What will be the result if set difference operator is applied as B-A on relations A and B
Ans: c

Q.24. What would be the result from cartesian product of Relation A and B (A X B)
Ans: c

Q.25. Which of the following would rename the "class" attribute to "course" in a relation called University
Ansa: a

Intro to SQL

Q.2. Which of the following is true for SQL:
Ans: d

Q.3. Which of the following is true:
Ans: b,d

Q.4. Which of the following is True:
Ans: b

SQL Command

Q.1 Which of the following deals with database schemas and table structure :
Ans: a

Q.2 Which of the following is true:
Ans: a,c,d

Q.3. ALTER command is a type of:
Ans: b

Q.4. Which of the following is not a part of Data Manipulation Language :
Ans: b

Filtering And Sorting DATA

Q.1.. **SQL Query - 8**

Send Feedback
Problem Statement:
Enlist the email ids of all the interns along with their names.
Ans: SELECT Emp_name, Email FROM Emp_data WHERE Contract = 'Intern';

Q.2.. **SQL Query - 9**

Send Feedback

Problem Statement:
Fetch the records of all employees of Department D3 with the FTE offer

Ans: Select Emp_ID, Emp_name, Dept, Contract, Email, HomeTown

FROM Emp_data WHERE Dept = 'D3' AND Contract = 'FTE';

Q.3.. **SQL Query - 10**

Send Feedback

Problem Statement:
Fetch all the records of the employees working for department D1 or D3.

AnS: Select Emp_ID, Emp_name, Dept, Contract, Email, HomeTown

FROM Emp_data WHERE Dept = 'D3' AND Contract = 'FTE';

Q.4.. **SQL Query - 12**

Send Feedback

Problem Statement:
Fetch all the records of the employees working for department D1 or D3 using the IN clause.

Ans: SELECT Emp_ID, Emp_name, Dept, Contract, Email, HomeTown

FROM Emp_data WHERE Dept IN ('D1', 'D3');

Q.4. **SQL Query - 13**

Send Feedback

Problem Statement:
Fetch all the records of employees that neither work for department D1 nor for D2.

Ams: SELECT Emp_ID, Emp_name, Dept, Contract, Email, HomeTown

FROM Emp_data WHERE Dept NOT IN ('D1', 'D2');

Q.4.. **SQL Query - 14**

Send Feedback

Problem Statement:
List down the employee name and department that are either from Mumbai or Jalandhar and hold an employee Id numbered less than 900.
Ams: SELECT Emp_name, Dept FROM Emp_data WHERE Emp_ID < 900 AND HomeTown IN ('Mumbai', 'Jalandhar');

Q.5.. **SQL Query - 17**

Send Feedback

Problem Statement:
Fetch all the records with Email ID’s starting from ‘fab’.

Ans: SELECT Emp_ID, Emp_name, Dept, Contract, Email, HomeTown

FROM Emp_data WHERE Email LIKE 'fab%';

Ans: SELECT Emp_ID, Emp_name, Dept, Contract, Email, HomeTown

FROM Emp_data WHERE Email LIKE 'fab%';

Q.6.. **SQL Query - 23**

Send Feedback

Problem Statement:
List down the Order ID's and their respective Ordering time, arranged in Ascending order by ordering time

Ans: SELECT Emp_ID, Emp_name, Dept, Contract, Email, HomeTown

FROM Emp_data WHERE Email LIKE 'fab%';

Q.7. **SQL Query - 24**

Send Feedback

Problem Statement:
Arrange the above-given data in descending order by Shipping time.

AnS: SELECT Emp_ID, Emp_name, Dept, Contract, Email, HomeTown

FROM Emp_data WHERE Email LIKE 'fab%';

Q.8.. **SQL Query - 25**

Send Feedback

Problem Statement:
Fetch out all the records but in descending order by ordering time and in case of similar order times sort in ascending order w.r.t. shipping time.
Ans: SELECT * FROM e_transactions ORDER BY ordered_time DESC, shipping_time ASC;

Q.9.. **SQL Query - 27**

Send Feedback

Problem Statement:
List down the orders ids with their shipping time which were ordered before 30th June 2021 sort them in ascending order w.r.t. cost and in descending order w.r.t. time the purchase was made.

Ans: SELECT order_id, shipping_time FROM e_transactions

* WHERE ordered_time < '2021-06-30' ORDER BY cost ASC, ordered_time DESC;

**** //// Assignment Not completd ********** ///////

Group Data

Q.1.. **SQL query - 13**

Send Feedback
Problem Statement:
List down the maximum salaries for each Job role
Ans: SELECT Job, MAX(Salary) FROM Employee_data GROUP BY Job;

Q.2.. **SQL query - 14**

Send Feedback
Problem Statement:
List down the average salary given out for each department for specific job roles.
Ans: SELECT Job, DeptCode, AVG(Salary) FROM Employee_data GROUP BY Job, DeptCode;

Q.3.. **SQL query - 19**

Send Feedback
Problem Statement:
List down the jobs having an average salary more than 3000 USD.
Ans: SELECT Job FROM Employee_data GROUP BY Job HAVING AVG(Salary) > 3000;

Q.4. **SQL query - 20**

Send Feedback
Problem Statement:
List down the department's codes that pay their employees (combined) more than 5000 USD and list them in ascending order of the minimum salary offered by each department.

Ans: SELECT DeptCode FROM Employee_data GROUP BY DeptCode

HAVING SUM(Salary) > 5000 ORDER BY MIN(Salary) ASC;

Q.5.. **SQL query - 21**

Send Feedback
Problem Statement:
List down the managers handling more than 2 employees, and make sure those employees don’t belong to departments 10 and 20.

Ans: SELECT Manager, COUNT(Manager) FROM Employee_data

WHERE DeptCode NOT IN (10, 20)

GROUP BY Manager HAVING COUNT(Manager) > 2;

Q.6.. **SQL query - 22**

Send Feedback
Problem Statement:
For All the Analyst jobs list down the maximum salaries offered to them in different

departments and under different managers, list all the details in ascending order based on the combined salary given out by that department.

Ans: SELECT Job, DeptCode, Manager, MAX(Salary) FROM Employee_data

WHERE Job = 'ANALYST'

GROUP BY Job, DeptCode, Manager

ORDER BY SUM(Salary) ASC;

Queries with Tables & Constraints

Q.1.. **SQL Query - 1**

Send Feedback

Problem Statement :
Write a query for creating a table named **People**, which contains information given in the table below:

ANS: CREATE TABLE People(

PID int,

LastName Varchar(255),

FirstName varchar(255),

Address varchar(255),

City varchar(255)

);

SELECT table_name, column_name, data_type

FROM information_schema.columns

WHERE table_name = 'People'

ORDER BY column_name;

Q.2.. **SQL Query -2**

Send Feedback

Problem Statement :
Write a query for creating a table named **Patients**, which contains the attribute given in the table below:

Ans: CREATE TABLE Patients (

Patient_id INT,

Patient_title CHAR NOT NULL,

Patient_name CHAR NOT NULL,

admit_date DATE

);

SELECT table_name, column_name, data_type

FROM information_schema.columns

WHERE table_name = 'Patients'

ORDER BY column_name;

Q.3.. **SQL Query - 4**

Send Feedback
Problem Statement:
Consider the tables given below:

1. The table **users** contains features like *id, full_name, enabled, last_login.* The attribute *id* here will be the *primary key*.
Attribute List(s):

Ans: CREATE TABLE users (

id INT PRIMARY KEY,

full_name VARCHAR,

enabled CHAR,

last_login DATE

);

SELECT table_name, column_name, data_type

```
FROM information_schema.columns

WHERE table_name = 'users';


CREATE TABLE addresses (

    user_id INT PRIMARY KEY,

    street VARCHAR NOT NULL,

    city VARCHAR NOT NULL,

    state VARCHAR NOT NULL,

    FOREIGN KEY (user_id) REFERENCES users(id)

)

SELECT table_name, column_name, data_type

FROM information_schema.columns

WHERE table_name = 'addresses';
```

Q.4.. Which of the following can accept NULL values?

Ans: b

Q.5. Which of the following is not a Key in MySQL?
Ans: b

Q.6.. Which of the following statements regarding Foreign Key is Incorrect.
Ans: a

Q.7.. Which statement is used to delete all rows in a table without logging the individual row deletions?
Ans: d

Modifiying Data

Q.1.. **SQL Query - 2**

Send Feedback

Problem Statement
Formulate a query to add a record, where you only fill in columns Roll_no, std_name, Age with the given data:

(7, Shantnu, 21)

Ans: INSERT INTO Students (Roll_no, std_name, Age) VALUES (7, 'Shantnu', 21);

SELECT * FROM Students;

Q.2.. **SQL Query - 3**

Send Feedback
Problem Statement:
Given a table named **stud_data**, formulate a query to change the **Fname and Age** of the already entered record to **(Neelabh, 22)** of **roll number 17**.

Ans: UPDATE stud_data SET Fname='Neelabh', Age=22 WHERE roll_no=17;

SELECT * FROM stud_data;

Ans: UPDATE stud_data SET Fname='Neelabh', Age=22 WHERE roll_no=17;

SELECT * FROM stud_data;

Q.3.. **SQL Query - 4**

Send Feedback
Problem Statement:
Consider a table named products, formulate a query deleting the record where product_id = 596 or 700.

Ans: DELETE FROM products WHERE product_id IN (596, 700);

SELECT * FROM products;

Joining table

Q.1.. **SQL Query - 1**

Send Feedback
Problem Statement:
Enlist all the employees ID's, names along with the Project allocated to them.

AnS: SELECT e.EmpID, e.EmpFName, e.EmpLName, p.ProjectID, p.ProjectName

FROM Employee e

INNER JOIN Project p ON p.EmpID = e.EmpID;

Q.2.. **SQL Query - 2**

Send Feedback
Problem Statement:
Fetch out all the employee ID’s and their contact detail who have been working from Delhi with the clients name working in Kolkata.

Ans: ELECT e.EmpID, e.EmailID, e.PhoneNo, c.ClientFName, c.ClientLName

FROM Employee e

INNER JOIN Client_d c ON c.EmpID = e.EmpID

WHERE e.City = 'Delhi' OR c.City = 'Kolkata'

Q.3.. **SQL Query - 3**

Send Feedback

Problem Statement:
List out all the project names with corresponding client's email id, for all the projects that were allocated after April 2021 and order them in descending order of the age of clients.

Ans: SELECT e.EmpID, e.EmailID, e.PhoneNo, c.ClientFName, c.ClientLName

FROM Employee e

INNER JOIN Client_d c ON c.EmpID = e.EmpID

WHERE e.City = 'Delhi' OR c.City = 'Kolkata'

Q.4.. **SQL Query - 4**

Send Feedback

Problem Statement:
Fetch out each project allocated to which employee.

AnS: SELECT e.EmpFname, e.EmpLname, p.ProjectID, p.ProjectName

FROM Employee e

* LEFT JOIN Project p ON e.EmpID = p.EmpID;

Q.5. **SQL Query- 5**

Send Feedback

Problem Statement:
List out all the projects along with the employee's name and their respective allocated email ID.

Ans: SELECT p.ProjectID, p.ProjectName, e.EmpFname, e.EmpLname, e.EmailID

FROM Employee e

RIGHT JOIN Project p ON p.EmpID = e.EmpID

Q.6.. **SQL Query- 6**

Send Feedback

Problem Statement:
List out all the client details email address, whose age is between 25 to 35, along with the projects assigned to them in ascending order of their age and project ID. Also, use c for client_d and p for project, as alias name of tables.

Ans: SELECT c.ClientID, c.ClientFname, c.ClientLname, c.ClientEmailID, p.ProjectID,

p.ProjectName

FROM Project p

RIGHT JOIN Client_d c ON c.ClientID = p.ClientID

* WHERE c.Age BETWEEN 25 AND 35

* ORDER BY c.Age , p.ProjectID;

Set Operations

Q.1.. **SQL Query - 1**

Send Feedback

Problem Statement:
Using the tables given below, list out all the employees of the company.

Ans: SELECT * FROM Empdept1 UNION SELECT * FROM Empdept2;

Q.2.. **SQL Query - 2**

Send Feedback

Problem Statement:
List down employees (all the details) from both the departments who work as Salesman.

Ans: SELECT * FROM Empdept1 WHERE Job = 'SALESMAN'

UNION SELECT * FROM Empdept2 WHERE Job = 'SALESMAN';

Q.3.. **SQL Query - 3**

Send Feedback

Problem Statement:
List out each employee name and employee code from both the departments and order them in ascending order by their code.

Ans: SELECT * FROM (SELECT EmpFName, EmpLName, EmpCode FROM EmpDept1

UNION ALL SELECT EmpFName, EmpLName, EmpCode FROM EmpDept2) AS emp

ORDER BY emp.EmpCode ASC

Q.4. **SQL Query - 4**

Send Feedback

Problem Statement:
Find out all the details of employees that work for both the departments.

Ans: SELECT DISTINCT * FROM Empdept1

INNER JOIN Empdept2 USING(EmpCode, EmpFName, EmpLName, Job);

Q.5. **SQL Query - 9**

Send Feedback

Problem Statement:
List down all the details of employees working in dept1 but not in Dept2.

Ans: SELECT * FROM Empdept1

LEFT JOIN Empdept2 USING (EmpCode, EmpFName, EmpLName, Job)

WHERE Empdept2.EmpCode IS NULL;

Q.6. **SQL query - 10**

Send Feedback

Problem Statement:
Formulate a MySQL query to list out all the projects(id, name) and employee's names (first, last) along with their respective Email id’s irrespective of the fact if that project is assigned or not and whether an employee is assigned any project or none.

Ans: SELECT p1.ProjectID, p1.ProjectName, e1.EmpFname, e1.EmpLname, e1.EmailID

FROM Project p1

LEFT JOIN Employee e1 ON e1.EmpID = p1.EmpID

UNION

```
SELECT p2.ProjectID, p2.ProjectName, e2.EmpFname, e2.EmpLname, e2.EmailID
    FROM Project p2
    RIGHT JOIN Employee e2 ON e2.EmpID = p2.EmpID
```

Sub Queries

Q.1. Suppose a user has 3 queries Q1, Q2 and Q3. These queries are written in a way i.e. Q1(Q2(Q3)). Which query will be executed first?
Ans: c

Q.2. Which of the following are the clauses in which subqueries exist?
Ans: b,c
Q.3. SQL query - 1

Send Feedback
Problem Statement:
Write a SQL query to find out the quantity supplied by anjali and rachit.

Ans: SELECT Qty FROM SP WHERE Sno IN (SELECT Sno FROM Supplier

* WHERE Sname IN ('anjali', 'rachit'));
Q.3SQL query - 2

Send Feedback
Problem Statement:
Write a SQL query to display the supplier name and city of the supplier who supplies parts with Pno 1 and 5.

Ans: SELECT Sname, City FROM Supplier WHERE Sno IN (SELECT Sno FROM SP

* WHERE Pno IN (1, 5));
Q.4.. SQL query - 3

Send Feedback
Problem Statement:
Write a SQL Query to get the colour of parts supplied by Supplier with Sno 1,3,6

Ans: SELECT Colour FROM Product WHERE Pno IN (SELECT Pno FROM SP

WHERE Sno IN (1,3,6));
Q.5.. SQL query - 4

Send Feedback
Problem Statement:
Write a SQL query to get the colour of parts supplied by all the employees except rachit and kashish.

Ans: SELECT Colour FROM Product WHERE Pno IN (SELECT Pno FROM SP

WHERE Sno NOT IN (1,6));

Q.6.. The given below relation schema is used to store information about the employees of a company, where ***empId*** is the primary key and ***depttid*** indicates the department of the employee.

Emp(empId, name, gender, salary, depttid)

Ans: a

Q.7. The given below relation schema is used to store information about the employees of a company, where ***empId*** is the primary key and ***deptt_id*** indicates the department of the employee.

Emp(empId, name, gender, salary, deptt_id);

Ans: c,d.

Q.8. SQL query - 5

Send Feedback

Problem Statement:

Write a SQL Query to get the supplier name who supply pencils with quantity greater than 10.

Ans: SELECT Sname FROM Supplier WHERE Sno IN (SELECT Sno FROM SP

WHERE Pno = 2 AND Qty > 10);

Q.8. SQL query - 7

Send Feedback

Problem Statement:

List down all the Employees whose salary is greater than that of Monica Geller.

Ans: SELECT EmpName FROM Employee

WHERE Salary > (SELECT Salary FROM Employee WHERE EmpName = 'Monica Geller');

Q.9.. SQL query - 8

Send Feedback

Problem Statement:

List down all the employees whose job is the same as Phoebe Buffay.

Ans: SELECT EmpName, Salary, DeptCOde, Job FROM Employee

* WHERE Job = (SELECT Job FROM Employee WHERE EmpName = 'Phoebe Buffay');

Q.1. Sub query - 9

Send Feedback

Problem Statement:

Print out all the employees with their respective Departments even if any employee’s salary is more than 4000.

Ans: SELECT EmpName, DeptCode FROM Employee

WHERE EXISTS (SELECT EmpName, DeptCode FROM Employee WHERE Salary > 4000);

Q.12. SQL query - 10

Send Feedback

Problem Statement:

Print the name and age of all oldest sailors.

Ans: SELECT sname, age FROM sailors WHERE age = (SELECT MAX(age) FROM sailors);

Q.13. SQL query - 11

Send Feedback

Problem Statement:

Find the name of boats and their respective colors of the sailors with minimum age.

Ans: SELECT bname, color FROM boats WHERE bid IN

(SELECT bid FROM reserves WHERE sid IN

(SELECT sid FROM sailors WHERE age = (SELECT MIN(age) FROM sailors)));

Q.14. SQL query - 12

Send Feedback

Problem Statement:

Find the IDs of sailors and their daytook for sailors with highest rating.

Ans: SELECT sid, daytook FROM reserves WHERE sid IN(

SELECT sid FROM sailors WHERE rating = (SELECT MAX(rating) FROM sailors));

Q.15. MCQ - 5

Send Feedback

Consider a table bank_records given below:

Customer	Bank Manager	Amount
Ram	Anchit	100000
Shyam	Gopal	50000
Makhan	Anchit	70000

What will be the output of the following query?

SELECT * FROM ((SELECT b.Customer, b.Bank_Manager FROM bank_records b) JOIN (SELECT r.Amount FROM bank_records r)) as br;

Ans:b

Q.15.. MCQ - 6

Send Feedback

The given below relation schema is used to store information about the employees of a company, where ***emp_Id*** is the primary key and ***dept_Id*** indicates the department of the employee.

Employee(emp_Id, name, gender, salary, dept_Id)

Consider the following SQL query:

Ans: a

Q.16. The given below relation schema is used to store information about the employees of a company, where ***emp_Id*** is the primary key and ***dept_Id*** indicates the department of the employee.

Employee(emp_Id, name, gender, salary, dept_Id)

Consider the following Query:

Ans: c

Q.17. Problem Statement:

Write a SQL query for the red-colored products whose original weight is less than 10 units; displaying information in the output table as: product name, colour and 20 times the original weight as 'w'.

Ans: SELECT Pname, Colour, 20*Weight as w FROM Product

*** WHERE Colour = 'red' AND Weight < 10;**

Q.18. **SQL query - 14**

Send Feedback

Problem Statement:

List down the employee details with their annual salary, given that the annual salary of the employees being listed should be greater than 30000

Ans: SELECT * FROM (SELECT EmpCode, EmpName, Salary, 12*Salary AS A_Sal FROM Employee) AS emp

WHERE emp.A_Sal > 30000;

Q.19. What is true about correlated subqueries?

Ans: c

Q.20. **SQL query - 15**

Send Feedback

Problem Statement:

Print the employee details for all employees who earn more than the average salary and having an “e” in their name.

Ans: SELECT EmpCode, EmpName, Salary FROM Employee

WHERE EmpName LIKE '%e%'

*** AND Salary > (SELECT AVG(Salary) FROM Employee);**

Q.21. **SQL query - 15**

Send Feedback

Problem Statement:
Find the ids and names of sailors who have reserved at least two different boats.

Ans: SELECT EmpCode, EmpName, Salary FROM Employee

WHERE EmpName LIKE '%e%'

*** AND Salary > (SELECT AVG(Salary) FROM Employee);**

Q.22. **SQL query - 16**

Send Feedback

Problem Statement:
Fetch out the color, sailor id and boat id of the boats reserved by the Sailor having 2nd highest rating.

Ans: SELECT b.color, j.sid, j.bid FROM

(SELECT sid, bid FROM reserves WHERE sid IN (

SELECT sid FROM sailors WHERE rating =

(SELECT MAX(rating) FROM sailors WHERE rating !=

(SELECT MAX(rating) FROM sailors)))) AS j

INNER JOIN boats b ON b.bid = j.bid

ORDER BY bid DESC;

Q.23. **SQL query - 18**

Send Feedback

Problem Statement:
Display all the sailor id, boat id and sailor name which are reserved by Sailors who have ratings more than the average rating in the reserves table.

Ans: SELECT a.sid , r.bid, a.sname FROM

(SELECT sid, sname FROM sailors WHERE rating > (SELECT AVG(rating) FROM sailors)) a

*** INNER JOIN reserves r ON r.sid = a.sid;**

Q.24. **SQL query - 19**

Send Feedback

Problem Statement:
Display all the sailor id, boat id, sailor name and boat color which are reserved by Sailors who have ratings less than the average rating in the reserves table.
Ans: SELECT r.sid , r.bid, s.sname, b.color FROM reserves AS r, boats AS b, sailors AS s

WHERE s.sid = r.sid

AND r.bid = b.bid

AND s.rating < (SELECT AVG(rating) FROM reserves INNER JOIN sailors WHERE s.sid = r.sid)

Q.25. Which of the following statements are FALSE?
Ans: c