All the query programs;

1. select ename ,jobtype, hiredata,eno from employee order by eno;
2. select distinct(jobtype) from employee;
3. select concat(ename,",", jobtype) as separatejob from employee;
4. select concat(eno,",",jobtype,",",supervisor,",",hiredata,",",dno,",",commission,",",salary) as THEOUTPUT from employee;
5. select ename,salary from employee where salary>2850;
6. select ename,dno from employee where eno='79';
7. select ename, salary from employee where salary not between 1500 and 2850;
8. select ename ,dno from employee where dno in(10,30) order by ename;
9. select ename,hiredata from employee where hiredata like '1981%';
10. select ename,jobtype from employee where supervisor is NULL;
11. select ename,salary,commission from employee where commission is not NULL;
12. select \* from employee order by salary and commission desc;
13. select ename from employee where ename like '\_\_A%';
14. select ename from employee where(ename like "%r%r%" or ename like "%a%a%") and (dno=30 or supervisor=778);
15. select ename ,salary,commission from employee where (1.05\* salary)<commission;
16. select curdate() as currentdate,dayname(curdate()) as currentday;
17. select ename,hiredata,adddate(six\_month\_after,mod(9-dayofweek(six\_month\_after),7)) as salary\_review\_date from(select ename,hiredata,date((period\_add(extract(year\_month from hiredata),6)\*100)+1) as six\_month\_after from employee)a;
18. select e.ename, timestampdiff(month,hiredata,curdate()) as number\_of\_months from employee e,department d where e.dno=d.dno and dname="sales";
19. select concat(ename,"earns",salary,"monthly but wants",(3\*salary)) as 'Dream Salary' from employee;
20. select concat(ucase(left(ename,1)),lower(substring(ename,2))) as name ,length(ename) from employee where ename like 'j%' or ename like 'a%' or ename like 'm%';
21. select ename,hiredata,dayname(hiredata),dayofweek(hiredata) from employee;
22. select ename,dname,e.dno from employee e, department d where e.dno=d.dno;
23. select distinct(jobtype) from employee from employee where dno=30;
24. select ename ,dname from employee e,department d where e.dno=d.dno and ename like “%a%”;
25. select ename,jobtype,e.dno,dname from employee e,department d where e.dno=d.dno and location=”dallas”;
26. select e1.ename,e1.eno,e1.supervisor,e2.ename from employee e1,employee e2 where e1.supervisor=e2.eno or(e1.supervisor is null and e2.supervisor is null);
27. select e1.ename,e1.dno,e1.salary,e2.ename from employee e1,employee e2 where e1.eno!=e2.eno and e1.dno =e2.dno and e1.salary=e2.salary;
28. select ename ,repeat(‘\*’,salary/100) as “\*=$100” from employee;
29. select max(salary) as highest ,min(salary) as lowest, sum(salary) as sum ,avg(salary) as average from employee;
30. select jobtype count(\*) as no\_of\_employees from employee group by jobtype;
31. select count(\*) as no\_of\_supervisor from employee where eno in(select supervisor from employee);
32. select dname,location, count(\*) as no\_of\_employee,AVG(salary) as average\_salary from employee e, department d where e.dno=d.dno group by dname;
33. select ename,hiredata from employee where dno in (select dno from employee where ename=”Blake”);
34. select eno,ename from employee where salary>(select AVG(salary) from employee);
35. select eno, ename from employee where dno in (select dno from employee where ename like “%t%”);
36. select ename,salary from employee where supervisor=(select eno from employee where ename=”king”);
37. select e.dno,ename,jobtype from employee e,department d where d where e.dno=d.dno and d.dno=(select dno from department where dname =”sales”);
38. select e.ename,dname from employee e , department d where e.dno=d.dno and timestampdiff(year,hiredata,curdate())>20;
39. select location ,count(\*) from department group by location;
40. select dname from department where dno in (select dno from employee group by dno having count(\*)>5);
41. select ename from employee where eno in (select supervisor from employee where supervisor is not null group by supervisor having count(\*)>3) or eno not in (select supervisor from employee where supervisor is not null group by supervisor);
42. select jobtype from employee group by jobtype having count(\*)=(select max(mycount) from(select count(\*) as mycount from employee group by jobtype)a) or count(\*)=(select min(mycount) from (select count(\*) as mycount from employee group by jobtype)a);

questions:

1. Query to display Employee Name, Job, Hire Date, Employee Number; for each employee

with the Employee Number appearing first.

2. Query to display unique Jobs from the Employee Table.

3. Query to display the Employee Name concatenated by a Job separated by a comma.

4. Query to display all the data from the Employee Table. Separate each Column by a comma

and name the said column as THE\_OUTPUT.

5. Query to display the Employee Name and Salary of all the employees earning more than

$2850.

6. Query to display Employee Name and Department Number for the Employee No= 79.

7. Query to display Employee Name and Salary for all employees whose salary is not in the

range of $1500 and $2850.

8. Query to display Employee Name and Department No. of all the employees in Dept 10 and

Dept 30 in the alphabetical order by name.

9. Query to display Name and Hire Date of every Employee who was hired in 1981.

10. Query to display Name and Job of all employees who have not assigned a supervisor.

11. Query to display the Name, Salary and Commission for all the employees who earn

commission.

12. Sort the data in descending order of Salary and Commission.

13. Query to display Name of all the employees where the third letter of their name is ‘A’.

14. Query to display Name of all employees either have two ‘R’s or have two ‘A’s in their

name and are either in Dept No = 30 or their Manger’s Employee No = 7788.

15. Query to display Name, Salary and Commission for all employees whose Commission

amount is greater than their Salary increased by 5%.

16. Query to display the Current Date along with the day name.

17. Query to display Name, Hire Date and Salary Review Date which is the 1st Monday after

six months of employment.

18. Query to display Name and calculate the number of months between today and the date

on which employee was hired of department ‘Purchase’.

19. Query to display the following for each employee <E-Name> earns < Salary> monthly

but wants < 3 \* Current Salary >. Label the Column as Dream Salary.

20. Query to display Name with the 1st letter capitalized and all other letter lower case and

length of their name of all the employees whose name starts with ‘J’, ’A’ and ‘M’.

21. Query to display Name, Hire Date and Day of the week on which the employee started.

22. Query to display Name, Department Name and Department No for all the employees.

23. Query to display Unique Listing of all Jobs that are in Department number 30.

24. Query to display Name, Dept Name of all employees who have an ‘A’ in their name.

25. Query to display Name, Job, Department No. And Department Name for all the

employees working at the Dallas location.

26. Query to display Name and Employee no. Along with their supervisor’s Name and the

supervisor’s employee no; along with the Employees’ Name who do not have a supervisor.

27. Query to display Name, Dept No. And Salary of any employee whose department No.

and salary matches both the department no. And the salary of any employee who earns a

commission.

28. Query to display Name and Salaries represented by asterisks, where each asterisk (\*)

signifies $100.

29. Query to display the Highest, Lowest, Sum and Average Salaries of all the employees

30. Query to display the number of employees performing the same Job type functions.

31. Query to display the total number of supervisors without listing their names.

32. Query to display the Department Name, Location Name, No. of Employees and the

average salary for all employees in that department.

33. Query to display Name and Hire Date for all employees in the same dept. as Blake.

34. Query to display the Employee No. And Name for all employees who earn more than the

average salary.

35. Query to display Employee Number and Name for all employees who work in a

department with any employee whose name contains a ‘T’.

36. Query to display the names and salaries of all employees who report to supervisor named

‘King’

37. Query to display the department no, name and job for all employees in the Sales

department

38. Display names of employees along with their department name who have more than 20

years experience

39. Display total number of departments at each location

40. Find the department name in which at least 20 employees work in.

41. Query to find the employee’ name who is not supervisor and name of supervisor

supervising more than 5 employees.

42. Query to display the job type with maximum and minimum employees

For adding a foreign key in the table

**ALTER TABLE Table\_Name1 ADD CONSTRAINT ForeignKey\_Name FOREIGN KEY (Column\_Name) REFERENCES Table\_Name2 (Column\_Name);**

Using order by commands.:

SELECT column1, column2, ...  
FROM table\_name  
ORDER BY column1, column2, ... ASC|DESC;

Using update commands :

UPDATE table\_name  
SET column1 = value1, column2 = value2, ...  
WHERE condition;

Ex: UPDATE Customers  
SET ContactName='Juan'  
WHERE Country='Mexico';

Delete a record:

DELETE FROM table\_name WHERE condition;

Min and max syntax

SELECT MIN(column\_name)  
FROM table\_name  
WHERE condition;

Ex: SELECT MAX(Price) AS LargestPrice  
FROM Products;

Count:

SELECT COUNT(column\_name)  
FROM table\_name  
WHERE condition;

Average

SELECT AVG(column\_name)  
FROM table\_name  
WHERE condition;

Sum

SELECT SUM(column\_name)  
FROM table\_name  
WHERE condition;

Like syntax

SELECT column1, column2, ...  
FROM table\_name  
WHERE columnN LIKE pattern;

Ex: SELECT \* FROM Customers  
WHERE CustomerName LIKE 'a%'

Join

SELECT column\_name(s)  
FROM table1  
INNER JOIN table2ON table1.column\_name = table2.column\_name;

Left join

SELECT column\_name(s)  
FROM table1  
LEFT JOIN table2ON table1.column\_name = table2.column\_name;

Ex: SELECT Customers.CustomerName, Orders.OrderID  
FROM Customers  
LEFT JOIN Orders ON Customers.CustomerID = Orders.CustomerID  
ORDER BY Customers.CustomerName;

Group by

SELECT column\_name(s)  
FROM table\_name  
WHERE condition  
GROUP BY column\_name(s)ORDER BY column\_name(s);

Alter talble commands\

ADD COLUMN: This command is used to add a new column to an existing table.

Syntax: ALTER TABLE table\_name ADD COLUMN column\_name datatype;

Example: ALTER TABLE customers ADD COLUMN email VARCHAR(50);

MODIFY COLUMN: This command is used to modify the data type, size or properties of an existing column in a table.

Syntax: ALTER TABLE table\_name MODIFY COLUMN column\_name new\_datatype;

Example: ALTER TABLE customers MODIFY COLUMN email NVARCHAR(100);

RENAME COLUMN: This command is used to rename an existing column in a table.

Syntax: ALTER TABLE table\_name RENAME COLUMN old\_column\_name TO new\_column\_name;

Example: ALTER TABLE customers RENAME COLUMN email TO email\_address;

DROP COLUMN: This command is used to remove a column from a table.

Syntax: ALTER TABLE table\_name DROP COLUMN column\_name;

Example: ALTER TABLE customers DROP COLUMN email\_address;

ADD CONSTRAINT: This command is used to add a new constraint to a table.

Syntax: ALTER TABLE table\_name ADD CONSTRAINT constraint\_name constraint\_definition;

Example: ALTER TABLE orders ADD CONSTRAINT order\_date CHECK (order\_date >= '2023-01-01');

DROP CONSTRAINT: This command is used to remove an existing constraint from a table.

Syntax: ALTER TABLE table\_name DROP CONSTRAINT constraint\_name;

Example: ALTER TABLE orders DROP CONSTRAINT order\_date;