

# SQL

1. **Write SQL query to create a table.**  
SQL> create table sample1(deptno number(2) primary key, dname varchar2(14), loc varchar2(13));
2. **Display the structure of dept table.**  
SQL> desc dept;
3. **Insert data into dept table.**  
SQL> insert into sample1 values(&deptno, '&dname', '&loc');
4. **Display details of dept table.**  
SQL> select \* from sample1;
5. **Display only department number.**  
SQL> select deptno from dept;
6. **Display details of smith.**  
SQL> select \* from emp where ename = 'smith';
7. **Display deptno and location.**  
SQL> select deptno, loc from dept;
8. **Display deptno, dname, and location from dept table.**  
SQL> select deptno, dname, loc from dept;
9. **Display system date or present date.**  
SQL> select sysdate from dual;
10. **Create emp table.**  
SQL> create table sample2(empno number(4) primary key, ename varchar2(10), job varchar2(9), mgr number(4), hiredate date, sal number(7,2), comm number(7,2), deptno number(2) references sample1(deptno));
11. **Insert data into emp table.**  
SQL> insert into sample2 values(&empno, '&ename', '&job', &mgr, '&date', &sal, &comm, &deptno);  
SQL> insert into sample2 values(2222, 'ram', 'clerk', 2000, '01-DEC-81', 4000, 200, 20);
12. **Display the structure of emp table.**  
SQL> desc emp;

- 13. Display the details of employees.**  
SQL> select \* from emp;
- 14. Display empno, enames, and their salaries from emp table.**  
SQL> select empno, ename, sal from emp;
- 15. Display employees' salary and their commission.**  
SQL> select sal, nvl(comm,0) from emp;
- 16. Display total salaries of all employees.**  
SQL> select sal+nvl(comm,0) from emp;
- 17. Display daily salaries of all employees.**  
SQL> select (sal/30) from emp;
- 18. Display annual salaries of all employees.**  
SQL> select (sal\*12) from emp;
- 19. Display details of employees along with their daily and annual salary.**  
SQL> select emp.\*, (sal/30) "Daily Salary", (sal\*12) "Annual Salary" from emp;
- 20. Display employee number, name and their experience.**  
SQL> select empno, ename, (sysdate - hiredate)/365 from emp;
- 21. Create a duplicate or dummy table.**  
SQL> create table emp5 as select \* from emp;
- 22. Display details of employees who are working as a clerk.**  
SQL> select \* from emp where job = 'clerk';
- 23. Display details of employees who are working in 10<sup>th</sup> department.**  
SQL> select \* from emp where deptno = 10;
- 24. Display details of employees who are receiving salary more than 2000.**  
SQL> select \* from emp where sal > 2000;
- 25. Display details of employees who are working in 10<sup>th</sup> or 20<sup>th</sup> department.**  
SQL> select \* from emp where deptno = 10 or deptno = 20;
- 26. Display details of employees who are working in 20<sup>th</sup> department as a clerk.**  
SQL> select \* from emp where deptno = 20 and job = 'clerk';

- 27. Display empno, name and salary of those who are working in 20<sup>th</sup> department as an analyst and receiving salary more than 2000.**

SQL> select \* from emp where deptno = 20 and job = 'analyst' and sal > 2000;

- 28. Display all the tables from Tab.**

SQL> select \* from tab;

- 29. Write a SQL query to clear the screen.**

SQL> clear screen;

- 30. Write a SQL query to save the content.**

SQL> commit;

- 31. Write a SQL query to Drop a table.**

SQL> drop table emp1.

- 32. Write a SQL query to set page size.**

SQL> set pagesize 300;

- 33. Write a SQL query to set line size.**

SQL> set linesize 200;

- 34. Write a SQL query to spool on and off**

SQL> spool 'D:\Read\3rd Semester\DBMS\SQL\nov16';

SQL> spool off;

- 35. Display details of employees in ascending order of their salary.**

SQL> select \* from emp order by sal;

- 36. Display the details of employees in descending order of their salaries.**

SQL> select \* from emp order by sal desc;

- 37. Display the details of employees in ascending order of their job.**

SQL> select \* from emp order by job;

- 38. Display the details of employees in descending order of their joining date.**

SQL> select \* from emp order by hiredate desc;

- 39. Display the details of employees in descending order of their commission.**

SQL> select \* from emp order by comm desc;

- 40. Display the details of employees in descending order of their annual salary.**  
SQL> select \* from emp order by (sal \* 12) desc;
- 41. Display the details of employees in ascending order of their experience.**  
SQL> select \* from emp order by (sysdate - hiredate);
- 42. Display the details of employees who are working under 30<sup>th</sup> department in ascending order of their job.**  
SQL> select \* from emp where deptno = 30 order by job;
- 43. Display the details of employees who are receiving salary more than 2000 in descending order of their experience.**  
SQL> select \* from emp where sal > 2000 order by (sysdate - hiredate) desc;
- 44. Display the details of employees whose name starts with “A”.**  
SQL> select \* from emp where ename like 'a%';
- 45. Display the details of employees whose name is having second letter as “A”.**  
SQL> select \* from emp where ename like '\_a%';
- 46. Display the details of employees whose name ends with “S”.**  
SQL> select \* from emp where ename like '%s';
- 47. Display the details of employees whose job starts with “C”.**  
SQL> select \* from emp where job like 'c%';
- 48. Display the details of employees whose name starts with “A” and ends with “N”**  
SQL> select \* from emp where ename like 'a%n';
- 49. Display the details of employees who has joined in month of December.**  
SQL> select \* from emp where hiredate like '%DEC%';
- 50. Display the details of employees who has joined in year of 81.**  
SQL> select \* from emp where hiredate like '%81';
- 51. List the employees of department number 30 or 10 who has joined in year of 81.**  
SQL> select \* from emp where (deptno = 30 or deptno = 10) and hiredate like '%81';
- 52. List all clerk of department number 20.**  
SQL> select \* from emp where deptno = 20 and job = 'clerk';

- 53. List the employees who didn't joined in month of march.**  
SQL> select \* from emp where hiredate not like '%MAR%';
- 54. List the employees whose emp number does not start with 78.**  
SQL> select \* from emp where empno not like '78%';
- 55. Display the details of employees whose employee number ends with 9.**  
SQL> select \* from emp where empno like '%9';
- 56. Display the details of employees whose job consists of string 'le'.**  
SQL> select \* from emp where job like '%le%';
- 57. Display the details of employees whose name start with 's' and ends with 's'.**  
SQL> select \* from emp where ename like 's%s';
- 58. Write a SQL query to concat ename with sal in emp table.**  
SQL> select concat(ename, sal) from emp;
- 59. Display sub string from 'hello world' starts with second location to forth location.**  
SQL> select substr('Hello World',2,4) from dual;
- 60. Display string "man" position in job.**  
SQL> select instr(job, 'man',1,1) from emp;
- 61. Display the details of employees who has the highest salary.**  
SQL> select \* from emp where sal = (select max(sal) from emp);
- 62. Display the details of employees who is having least salary.**  
SQL> select \* from emp where sal = (select min(sal) from emp);
- 63. Display the details of employees who is having average salary.**  
SQL> select \* from emp where sal = (select avg(sal) from emp);
- 64. Display the details of employees who are having more than average salary.**  
SQL> select \* from emp where sal > (select avg(sal) from emp);
- 65. Display the total salary of all employees.**  
SQL> select avg(sal) "Average Salary" from emp;

- 66. Display the average salary of all employees.**  
SQL> select avg(sal) "Average Salary " from emp;
- 67. Display highest salary of all employees.**  
SQL> select max(sal) "Max Salary" from emp;
- 68. Display minimum salary of employees.**  
SQL> select min(sal) "Min Salary" from emp;
- 69. Display the number of employees in organization.**  
SQL> select count(empno) "Total Employees" from emp;
- 70. Display total salary for each department.**  
SQL> select deptno,sum(sal) from emp group by deptno;
- 71. Display min salary of each department.**  
SQL> select deptno, min(sal) from emp group by deptno;
- 72. Display total employees from each department.**  
SQL> select deptno,count(empno) from emp group by deptno;  
SQL> select deptno,count(\*) from emp group by deptno;
- 73. Display unique jobs from emp table.**  
SQL> select unique job from emp;  
SQL> select distinct job from emp;
- 74. Display all unique jobs in descending order.**  
SQL> select unique job from emp order by job desc;
- 75. List the employee who has joined before 1981.**  
SQL> select \* from emp where hiredate< '01-JAN-1981';
- 76. Display the details of employees whose comm is more than their salary.**  
SQL> select \* from emp where comm >sal;
- 77. List the employees along with their experience whose daily salary is more than 100.**  
SQL> select ename,(sysdate-hiredate)/365,(sal/30) from emp where (sal>100);
- 78. List the employees who are working for the department 10 or 20.**  
SQL> select \* from emp where deptno = 10 or deptno = 20;

- 79. List the employees who are having five character in their name.**  
SQL> select \* from emp where length(ename)=5;
- 80. List the employees whose name has five character and starts with “S”.**  
SQL> select \* from emp where length(ename) = 5 and ename like 's%';
- 81. List the employees whose name must contain third character as “R” and has four character.**  
SQL> select \* from emp where length(ename) = 4 and ename like '\_\_r%';
- 82. List the employees whose name starts with “S”, end with “N” and has five character.**  
SQL> select \* from emp where length(ename) = 5 and ename like 's%n';
- 83. Write SQL query to create a view.**  
SQL> create view dept1\_view as select \* from dept;
- 84. Display data from more than one table.**  
SQL> select \* from emp, dept where emp.deptno= dept.deptno;
- 85. Display emp and dept information.**  
SQL> select \* from emp, dept where emp.deptno = dept.deptno;
- 86. Display the location smith.**  
SQL> select ename, loc from emp, dept where emp.deptno = dept.deptno and ename = 'smith';
- 87. Display details of employees who works in Chicago.**  
SQL> select \* from emp, dept where emp.deptno = dept.deptno and dept.loc = 'chicago';
- 88. Display the details of employees who are working under research department.**  
SQL> select \* from emp, dept where emp.deptno = dept.deptno and dept.dname = 'research';  
SQL> select \* from emp, dept where emp.deptno = dept.deptno and dname = 'research';



- 89. List total information of emp table along with dname and location of all employees who are working in accounting and research department in ascending order of dept number.**

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SQL> select emp.*, dept.dname, dept.loc from emp, dept where emp.deptno = dept.deptno and dname = 'accounting' or dname = 'research' order by emp.deptno;
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- 90. Display total salary for each department.**

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SQL> select deptno, sum(sal) from emp group by deptno;
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- 91. Display total salary for each department which is more than 9000.**

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SQL> select deptno, sum(sal) from emp having sum(sal)>9000 group by deptno;
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- 92. Display total salary for each department or job which is more than 5000.**

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SQL> select job, sum(sal) from emp having sum(sal)>5000 group by job;
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- 93. Display minimum salary for each job.**

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SQL> select job, min(sal) from emp group by job;
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- 94. Display minimum salary for each job which is less than 3000.**

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SQL> select job, min(sal) from emp having min(sal)<3000 group by job;
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- 95. Display details of employees whose salary is greater than or equal to 1500 and less than or equal to 3000.**

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SQL> select * from emp where sal>=1500 and sal<=3000;
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SQL> select * from emp where sal between 1500 and 3000;
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- 96. Display details of employees who are working as either clerk or manager.**

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SQL> select * from emp where job='clerk' or job='manager';
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- 97. Display details of employees who are working under 10<sup>th</sup> and 20<sup>th</sup> department.**

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SQL> select * from emp where deptno in(10,20);
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- 98. Display details of employees whose salaries is more than salary of empno 7566.**

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SQL> select * from emp where sal>(select sal from emp where empno = 7566);
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- 99. Display details of employees whose job is similar to job of smith.**

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SQL> select * from emp where job=(select job from emp where ename='smith');
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- 100. Display details of employees whose has joined after turner.**  
SQL> select \* from emp where hiredate > (select hiredate from emp where ename = 'turner');
- 101. Display the details of employees who are working under adams' department.**  
SQL> select \* from emp where deptno = (select deptno from emp where ename = 'adams');
- 102. Display the details of employees who are working in dallas.**  
SQL> select \* from emp where deptno=(select deptno from dept where loc='dallas');
- 103. Display the detail of employee who is receiving maximum salary.**  
SQL> select \* from emp where sal=(select max(sal) from emp);
- 104. Display the detail of employee who is receiving minimum salary.**  
SQL> select \* from emp where sal=(select min(sal) from emp);
- 105. Display the details of employees who are receiving more than average salary.**  
SQL> select \* from emp where sal>(select avg(sal) from emp);
- 106. Display the details of employee who is receiving 2<sup>nd</sup> lowest salary.**  
SQL> select \* from emp where sal = (select min(sal) from emp where sal>(select min(sal) from emp));
- 107. Display the details of employee who is receiving 2<sup>nd</sup> highest salary.**  
SQL> select \* from emp where sal=(select max(sal) from emp where sal<(select max(sal) from emp));
- 108. Display the details of employee who is receiving 3<sup>rd</sup> highest salary.**  
SQL> select \* from emp where sal = (select max(sal) from emp where sal < (select max(sal) from emp where sal < (select max(sal) from emp))));
- 109. Display the details of employee who is receiving 3<sup>rd</sup> lowest salary.**  
SQL> select \* from emp where sal = (select min(sal) from emp where sal > (select min(sal) from emp where sal > (select min(sal) from emp))));
- 110. Display the details of employee who is receiving n<sup>th</sup> highest salary.**  
SQL> select \* from emp e1 where &n = (select count(distinct sal) from emp e2 where e2.sal >= e1.sal);

- 111. Display the details of employee whose salary is equal to maximum salary from each department.**  
SQL> select \* from emp where sal in(select max(sal) from emp group by deptno);
- 112. Display the details of employee whose salary is equal to minimum salary from each department.**  
SQL> select \* from emp where sal in(select min(sal) from emp group by deptno);
- 113. Display the details of employee whose salary is less than the maximum of minimum salary from each department.**  
SQL> select \* from emp where sal < (select max(min(sal)) from emp group by deptno);
- 114. Display the details of employee who are receiving salary less than minimum of minimum from each department.**  
SQL> select \* from emp where sal < (select min(min(sal)) from emp group by deptno);
- 115. Display the details of employee who are receiving salary more than maximum of maximum salary from each department.**  
SQL> select \* from emp where sal > (select max(max(sal)) from emp group by deptno);
- 116. Display the details of employee who are receiving salary less than the minimum of average salary from each department.**  
SQL> select \* from emp where sal < (select min(avg(sal)) from emp group by deptno);
- 117. Display employees' number, ename, job, salary and revised salary. Condition for revised salary are as follows**
- a. If job is clerk give hick 10%.**
  - b. If job is salesmen give hick 15%.**
  - c. f job is manager give hick 7%;**
  - d. Remaining job should be same.**

SQL> select empno, ename, job, sal, case job when 'clerk' then 1.10 \* sal when 'salesman' then 1.15 \* sal when 'manager' then 1.07 \* sal else sal end "revised salary" from emp;

- 118. Display details of employees who are receiving salary that is even.**  
SQL> select \* from emp where mod(sal,2) = 0;

**119. Display details of employees who are receiving salary that is odd.**

SQL> select \* from emp where mod(sal,2) != 0;

**120. Write a SQL query to create users.**

SQL> create user Priyanka identified by 123;

**121. Write SQL query to assign create session to user.**

SQL> grant create session to Priyanka;

**122. Write a SQL query to create roles.**

SQL> create role manager;

**123. Write a SQL query to assign insert and select privileges to role.**

SQL> grant insert,select on sample1 to manager;

**124. Write a SQL query to assign roles to users.**

SQL> grant role to user;

SQL> grant gamer to user1;

**125. Write a SQL query to revoke privileges from a user.**

SQL> revoke insert, select on sample1 from manager;

**126. LPAD**

SQL> select lpad('hello world',25,'\*') from dual;

**127. RPAD**

SQL> select rpad('hello world',25,'\*') from dual;

**128. L-Trim**

SQL> select ltrim('bspigt','b') from dual;

**129. R-Trim**

SQL> select rtrim('bspigt','t') from dual;

**130. Replace**

SQL> select replace('jack and jue','j','bl') from dual;

**131. Months\_between ()**

SQL> select months\_between ('25-AUG-18',sysdate) from dual;

**132. Next\_day**

SQL> select next\_day(sysdate,'wednesday') from dual;

**133. Last\_day**

SQL> select last\_day(sysdate) from dual;

**134. Round**

SQL> select round(sysdate,'month') from dual;

**135. Trunc**

SQL> select trunc(sysdate,'month')from dual;

**136. Add\_months**

SQL> select add\_months(sysdate,2) from dual;

**137. Literals**

SQL> select ename|| ':' || sal from emp;