

Assignment

Name - Aman Yadav

subject - Database Management System (Lab)

Course - B.Sc. Cs (3rd sem)

Roll no - 20207005

enroll no - GGV/20/05105

Department - Computer Science and Information Technology.

Name: Aman Yadav.

Aman.

Table: dept

	dno	dname	location
1	10	Accounting	New York
2	20	Research	Dallas
3	30	Sales	Chicago
4	40	Operation	Boston
5	50	Marketing	New Delhi

Table: employee

	eno	ename	job-type	manager	hire-date	dno	commission	salary
1	736	Smith	Clerk	790	1981-12-17	20	0.00	1000.00
2	749	Allan	Salesman	769	1981-12-02	30	300.00	2000.00
3	752	Ward	Salesman	769	1981-02-22	30	500.00	1300.00
4	756	Jones	Manager	783	1981-04-02	20	0.00	2300.00
5	765	Martin	Salesman	784	1981-05-01	30	1400.00	1250.00
6	769	Blake	Manager	783	1981-06-09	30	0.00	2870.00
7	778	Clark	Manager	783	1981-11-17	10	0.00	2900.00
8	783	King	President	null	1981-09-08	10	0.00	2950.00
9	784	Turner	Salesman	769	1983-01-12	30	0.00	1450.00
10	787	Adams	Clerk	778	1982-12-09	20	0.00	1150.00
11	788	Scott	Analyst	756	1981-12-03	20	0.00	2870.00
12	790	James	clerk	769	1981-12-03	30	0.00	950.00
13	792	ford.	Analyst	756	1981-12-03	20	0.00	2600.00
14	793	Miller	Clerk	788	1982-01-23	40	0.00	1300.00

Lab Assignment

①

```
create database Aman;  
use database Aman;
```

```
create table dept (  
    dno int not null,  
    dname varchar(50) default null,  
    location varchar(50) default null,  
    primary key (dno));
```

```
insert into dept values (10, 'Accounting', 'New York'),  
    (20, 'Research', 'Dallas'),  
    (30, 'Sales', 'Chicago'),  
    (40, 'Operation', 'Boston'),  
    (50, 'Marketing', 'New Delhi');
```

```
create table employee (  
    eno char(3) not null,  
    ename varchar(50) not null,  
    job-type varchar(50) not null,  
    manager char(3) default null,  
    hire_date date not null,  
    dno int default null,  
    commission decimal(10,2) default null,  
    salary decimal(7,2) not null,  
    primary key (eno),  
    constraint dno foreign key (dno) reference  
    dept(dno),  
    constraint manager foreign key (manager)  
    reference employee (eno)  
);
```

```
insert into employee values  
    ('736', 'Smith', 'Clerk', '790', '1981-12-17', 20, 0.00, 1000.00),  
    ('749', 'Allan', 'Sales man', '769', '1981-02-20', 30, 300.00, 2000.  
    00),  
    ('752', 'Ward', 'Salesman', '769', '1981-02-22'), 30, 500.00,  
    1300.00),
```

('756', 'Jones', 'Manager', '783', '1981-04-02', 20, 0.00, 2300.00),
 ('765', 'Martin', 'Salesman', '784', '1981-04-22', 30, 1400.00, 1250.00),
 ('769', 'Blake', 'Manager', '783', '1981-05-01', 30, 0.00, 2870.00),
 ('772', 'Clark', 'Manager', '783', '1981-11-17', 10, 0.00, 2900.00),
 ('783', 'King', 'President', null, '1981-06-09', 10, 0.00, 2950.00),
 ('784', 'Turner', 'Salesman', '769', '1981-09-08', 30, 0.00, 1450.00),
 ('787', 'Adams', 'Clerk', '778', '1983-12-09', 20, 0.00, 1150.00),
 ('788', 'Scott', 'Analyst', '756', '1982-12-09', 20, 0.00, 2850.00),
 ('790', 'James', 'Clerk', '769', '1981-12-03', 30, 0.00, 950.00),
 ('792', 'Ford', 'Analyst', '756', '1981-12-03', 20, 0.00, 2600.00),
 ('793', 'Miller', 'Clerk', '788', '1982-01-23', 40, 0.00, 1300.00);

Query -

1. Query to display employee name, job, hire date, employee number, for each employee with the employee number appearing first.

```
select eno, ename, job-type, hire-date from employee;
```
2. Query to display unique jobs from employee table

```
select distinct job-type from employee;
```
3. Query to display employee name concatenated by a job separated by a comma.

```
select concat(ename, ', ', job-type) as 'ename, job' from employee;
```
4. Query to display all the data from employee table separate each column by a comma and name the said column as 'THE_OUTPUT'.

```
select concat(enno, ', ', ename, ', ', job-type, ', ', manager, ', ', hire-date, ', ', commission, ', ', salary) as 'THE_OUTPUT' from employee;
```

5. Query to display employee name and salary of all employee who earn more than ₹2850. (3)

```
select ename, salary from employee where salary > 2850;
```

6. Query to display employee name and department no. for employee no = 790

```
select ename, dno from employee where eno = 790;
```

7. Query to display employee name and salary for all employee whose salary is not in range of 1500 and 2850.

```
select ename, salary from employee where salary not between 1500 and 2850;
```

8. Query to display employee name and department no. of all employee in department 10 and department 30 in alphabetical order by name

```
select ename, dno from employee where dno in (10, 30) order by ename asc;
```

9. Query to display name and hire-date of every employee who was hired in 1981.

```
select ename, hire-date from employee where hire-date like '1981%';
```

10. Query to display name and job of all employee who don't have current manager

```
select ename, job-type from employee where manager is null;
```

11. Query to display name, salary and commission for all employee who earn commission.

```
select ename, salary, commission from employee where commission not in (0);
```

12. Sort the data in desc order of salary and commission

```
select * from employee order by salary desc;
```

(13) Query to display the name of employee whose third letter is a.

select ename from employee where ename like '__a%';

(14) Query to display name of all employee whose either have 2 s or have 2 a in their name and are either in dept no = 30 or their manager no = 778.

select ename, dno, manager from employee where ename like '%s%s%' or ename like '%a%a%' and dno = 30 or manager = 778;

(15) Query to display name, salary and commission of all employees whose commission amount is 14 greater than their salary increased by 5%.

select ename, salary, commission from employee where commission > (salary + salary * 0.05);

(16) Query to display current date.

select getdate() as date;

(17) Query to display the following for each employee <E-name> earns <salary> monthly but wants <3 * current salary> label the column as dream salary.

select concat (ename, ' earns ', salary, ' monthly but wants ', 3 * salary, '.') as Dream-Salary from employee;

(20) Query to display name with the 1st letter capitalized and all other letter lower case and length of all emp. whose name starts with J, A and M.

select concat(upper(substring(ename, 1, 1)), lower(substring(2, 50))) as name, len(ename) as length from employee where ename like 'j%' or ename like 'a%' or ename like 'm%';

- (23) Query to display unique listing of all jobs that are in department = 30,
 select distinct job.type from employee where dno = 30;
- (36) Query to display the name and salary of all employees who report to king.
1. select ename, salary from employee where manager = 783;
 2. select ename, salary from employee where manager = (select eno from employee where ename = 'king');
- (37) Query to display ename, department name, and dno from dno = 30;
- ```
select dno, ename, jobtype from employee where dno = 30;
```
- (22) Query to display name, ~~hire date~~ department name and department no. for all the employees.
- ```
select employee.ename, dept.dname, dept.dno from dept join employee on employee.dno = dept.dno;
```
- (24) Query to display name dept name of all employees who have an 'a' in their name.
- ```
select employee.ename, dept.dname from employee join dept on employee.dno = dept.dno where ename like '___a%';
```
- (25) Query to display name, job, department no and department name of all employees working at Dallas location.
- ```
select employee.ename, employee.job.type, dept.dno, dept.dname from employee join dept on employee.dno = dept.dno where dept.[location] = 'Dallas';
```

(28) Query to display name and salaries represented by asterisk where each * defines \$100.

```
select ename, replicate('*', (salary/100)) as Salary_in_asterisk from employee;
```

(29) Query to display highest, lowest, sum and average salary of all the employee.

```
select max(salary) as max, min(salary) as min, sum(salary) as sum, avg(salary) as average from employee;
```

(31) Query to display the no. of managers without listing their name.

```
select count(distinct manager) as total-manager from employee;
```

(30) Query to display the number of employee performing the same job type function.

```
select job-type, count(*) as no.-of-employee from employee group by job-type;
```

(33) Query to display name, hiredate for all employees in the same dept as Blake.

```
select ename, hire-date from employee where dno = (select dno from employee where ename = 'Blake');
```

(34) Select eno, and name for all employee who earn more than the average salary.

```
select eno, ename from employee where salary > (select avg(salary) from employee);
```