

My SQL Queries

Creating table

```
mysql> use Ayush;
Database changed
mysql> create table employee(Emp_ID varchar(5),First_Name varchar(20),last_Name Varchar(20),age int,Post varchar(10),Salary int,city v
varchar(120));
Query OK, 0 rows affected (0.08 sec)

mysql> show table employee;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right
syntax to use near 'employee' at line 1
mysql> desc employee;
```

Field	Type	Null	Key	Default	Extra
Emp_ID	varchar(5)	YES		NULL	
First_Name	varchar(20)	YES		NULL	
last_Name	varchar(20)	YES		NULL	
age	int	YES		NULL	
Post	varchar(10)	YES		NULL	
Salary	int	YES		NULL	
city	varchar(120)	YES		NULL	

```
7 rows in set (0.04 sec)

mysql> INSERT INTO employee (Emp_ID, First_Name, Last_Name, Age, Post, Salary, City)
-> VALUES
-> ('E001', 'John', 'Doe', 30, 'Manager', 60000, 'New York'),
-> ('E002', 'Jane', 'Smith', 25, 'Analyst', 50000, 'Los Angeles'),
-> ('E003', 'David', 'Brown', 28, 'Developer', 55000, 'chicago');
Query OK, 3 rows affected (0.02 sec)
Records: 3 Duplicates: 0 Warnings: 0

mysql> SELECT * FROM employee;
```

Emp_ID	First_Name	last_Name	age	Post	Salary	city
E001	John	Doe	30	Manager	60000	New York
E002	Jane	Smith	25	Analyst	50000	Los Angeles
E003	David	Brown	28	Developer	55000	Chicago

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Table filtering queries

Show employee by city Dehradun, Kanpur Lucknow with age >55,

```
mysql> select * from emp where city="dehradun";
```

Emp_ID	First_Name	Last_Name	age	Post	M_ID	Salary	city
E01	Arjun	Singh	55	Clerk	M01	45000	Dehradun
E05	Singh	Vikas	53	Clerk	M04	35000	Dehradun
E06	Akhilesh	Rao	32	Accountant	M03	42000	Dehradun
E11	Kamal	Kalash	65	Clerk	M03	90000	Dehradun
E12	AB	AC	65	Clerk	M03	90000	Dehradun
E13	AD	AB	65	Clerk	M03	90000	Dehradun
E14	AA	AA	65	Clerk	M03	90000	Dehradun

7 rows in set (0.00 sec)


```
mysql> select * from emp where city="dehradun" and age>55;
```

Emp_ID	First_Name	Last_Name	age	Post	M_ID	Salary	city
E11	Kamal	Kalash	65	Clerk	M03	90000	Dehradun
E12	AB	AC	65	Clerk	M03	90000	Dehradun
E13	AD	AB	65	Clerk	M03	90000	Dehradun
E14	AA	AA	65	Clerk	M03	90000	Dehradun

4 rows in set (0.00 sec)

rows in set (0.00 sec)

mysql> select * from emp where city not in("kanpur","lucknow");

Emp_ID	First_Name	Last_Name	age	Post	M_ID	Salary	city
E01	Arjun	Singh	55	Clerk	M01	45000	Dehradun
E05	Singh	Vikas	53	Clerk	M04	35000	Dehradun
E06	Akhilesh	Rao	32	Accountant	M03	42000	Dehradun
E08	Vijay	Rao	35	Developer	M05	41000	Haridwar
E09	Vimal	Jalan	36	Clerk	M01	25000	Haridwar
E10	vijay	Jalan	36	Clerk	M02	25000	Haridwar
E11	Kamal	Kalash	65	Clerk	M03	90000	Dehradun
E12	AB	AC	65	Clerk	M03	90000	Dehradun
E13	AD	AB	65	Clerk	M03	90000	Dehradun
E14	AA	AA	65	Clerk	M03	90000	Dehradun

0 rows in set (0.00 sec)

mysql> select * from emp where city like "k%";

Emp_ID	First_Name	Last_Name	age	Post	M_ID	Salary	city
E02	Shiv	Mohan	35	Accountant	M01	30000	Kanpur
E04	Vikram	Singh	57	BM	M03	50000	Kanpur

2 rows in set (0.01 sec)

mysql>

mysql> select * from emp where last_name like "s%";

Emp_ID	First_Name	Last_Name	age	Post	M_ID	Salary	city
E01	Arjun	Singh	55	Clerk	M01	45000	Dehradun
E04	Vikram	Singh	57	BM	M03	50000	Kanpur

2 rows in set (0.01 sec)

mysql> select * from emp where city in("kanpur","lucknow");

Emp_ID	First_Name	Last_Name	age	Post	M_ID	Salary	city
E02	Shiv	Mohan	35	Accountant	M01	30000	Kanpur
E03	Ram	Charan	55	AM	M02	44000	Lucknow
E04	Vikram	Singh	57	BM	M03	50000	Kanpur
E07	Akshay	Kumar	32	Trainer	M04	43000	Lucknow

4 rows in set (0.00 sec)

Show the employee salary between 30000 and 40000

Show the employee firstname age post whose city Kanpur

Show the employee post=clerk

```
mysql> select * from emp where salary between 30000 and 40000;
```

Emp_ID	First_Name	Last_Name	age	Post	M_ID	Salary	city
E02	Shiv	Mohan	35	Accountant	M01	30000	Kanpur
E05	Singh	Vikas	53	Clerk	M04	35000	Dehradun

2 rows in set (0.00 sec)

```
mysql> select first_name,age,post,city from emp where city="kanpur";
```

first_name	age	post	city
Shiv	35	Accountant	Kanpur
Vikram	57	BM	Kanpur

2 rows in set (0.00 sec)

```
mysql> select first_name,age,post,city from emp where post="clerk";
```

first_name	age	post	city
Arjun	55	Clerk	Dehradun
Singh	53	Clerk	Dehradun
Vimal	36	Clerk	Haridwar
vijay	36	Clerk	Haridwar
Kamal	65	Clerk	Dehradun
AB	65	Clerk	Dehradun
AD	65	Clerk	Dehradun
AA	65	Clerk	Dehradun

Null value

```
ERROR 1136 (21S01): Column count doesn't match value count at row 1
```

```
mysql> insert into emp values("E15","Nikhil",null,55,"Student","M05",null,"Dehradun");
```

Query OK, 1 row affected (0.14 sec)

```
mysql> desc emp;
```

Field	Type	Null	Key	Default	Extra
Emp_ID	varchar(20)	NO	PRI	NULL	
First_Name	varchar(20)	YES	MUL	NULL	
Last_Name	varchar(20)	YES	MUL	NULL	
age	int	YES		NULL	
Post	varchar(10)	YES		NULL	
M_ID	varchar(10)	YES		NULL	
Salary	int	YES		NULL	
city	varchar(10)	YES		NULL	

```
3 rows in set (0.08 sec)
```

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city	varchar(10)	YES		NULL	
------	-------------	-----	--	------	--

```
8 rows in set (0.01 sec)
```

```
mysql> select * from emp where post is null;
```

[illegible]

```
1 row in set (0.00 sec)
```

```
mysql>
```

Custom column bonus 10% of salary
Custom column final salary salary + bonus

```
mysql> select first_Name,salary*10/100 as bonus from employee;
```

first_Name	bonus
Arjun	4500.0000
Shiv	3500.0000
Ram	5500.0000
Ram	5500.0000
Singh	3000.0000
Ayush	5000.0000
Nikhil	NULL

rows in set (0.00 sec)

```
mysql> select first_name,salary,salary*10/100 as bonus,salary+salary*10/100 as Final_Salary from emp;
```

first_name	salary	bonus	Final_Salary
Arjun	45000	4500.0000	49500.0000
Shiv	30000	3000.0000	33000.0000
Ram	44000	4400.0000	48400.0000
Vikram	50000	5000.0000	55000.0000
Singh	35000	3500.0000	38500.0000
Akhilesh	42000	4200.0000	46200.0000
Akshay	43000	4300.0000	47300.0000
Vijay	41000	4100.0000	45100.0000
Vimal	25000	2500.0000	27500.0000
vijay	25000	2500.0000	27500.0000
Kamal	90000	9000.0000	99000.0000
AB	90000	9000.0000	99000.0000

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ALTER TABLE table name
ADD column name datatype;

ALTER TABLE table name
DROP COLUMN column name;

ALTER TABLE table name
MODIFY COLUMN column name datatype;

alter table mytable change age EmpAge int;

alter table my rename to mytable;

Alter table add bonus column.
 Update bonus 700 of emp id e02.
 Update bonus 10% of salary.
 Change bonus column data type to int.
 Drop column bonus.
 Alter column name M_id to manager_ID

```
mysql> alter table emp add column bonus float;
Query OK, 0 rows affected (0.52 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> select * from emp;
```

Emp_ID	First_Name	Last_Name	age	Post	M_ID	Salary	city	bonus
E01	Arjun	Singh	55	Clerk	M01	45000	Dehradun	NULL
E02	Shiv	Mohan	35	Accountant	M01	30000	Kanpur	NULL
E03	Ram	Charan	55	AM	M02	44000	Lucknow	NULL
E04	Vikram	Singh	57	BM	M03	50000	Kanpur	NULL
E05	Singh	Vikas	53	Clerk	M04	35000	Dehradun	NULL
E06	Akhilesh	Rao	32	Accountant	M03	42000	Dehradun	NULL
E07	Akshay	Kumar	32	Trainer	M04	43000	Lucknow	NULL
E08	Vijay	Rao	35	Developer	M05	41000	Haridwar	NULL
E09	Vimal	Jalan	36	Clerk	M01	25000	Haridwar	NULL
E10	vijay	Jalan	36	Clerk	M02	25000	Haridwar	NULL
E11	Kamal	Kalash	65	Clerk	M03	90000	Dehradun	NULL
E12	AB	AC	65	Clerk	M03	90000	Dehradun	NULL
E13	AD	AB	65	Clerk	M03	90000	Dehradun	NULL
E14	AA	AA	65	Clerk	M03	90000	Dehradun	NULL
E15	Nikhil	NULL	55	Student	M05	NULL	Dehradun	NULL
E16	NULL	NULL	NULL	NULL	NULL	NULL	Dehradun	NULL


```
mysql> update emp set bonus=700 where emp_id="e02";
Query OK, 1 row affected (0.08 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> select * from emp;
```

Emp_ID	First_Name	Last_Name	age	Post	M_ID	Salary	city	bonus
E01	Arjun	Singh	55	Clerk	M01	45000	Dehradun	500
E02	Shiv	Mohan	35	Accountant	M01	30000	Kanpur	700
E03	Ram	Charan	55	AM	M02	44000	L	

```
mysql> update emp set bonus=salary*10/100;
Query OK, 14 rows affected (0.02 sec)
Rows matched: 16  Changed: 14  Warnings: 0
```

```
mysql> select * from emp;
```

Emp_ID	First_Name	Last_Name	age	Post	M_ID	Salary	city	bonus
E01	Arjun	Singh	55	Clerk	M01	45000	Dehradun	4500
E02	Shiv	Mohan	35	Accountant	M01	30000	Kanpur	3000
E03	Ram	Charan	55	AM	M02	44000	Lucknow	4400
E04	Vikram	Singh	57	BM	M03	50000	Kanpur	5000
E05	Singh	Vikas	53	Clerk	M04	35000	Dehradun	3500
E06	Akhilesh	Rao	32	Accountant	M03	42000	Dehradun	4200
E07	Akshay	Kumar	32	Trainer	M04	43000	Lucknow	4300
E08	Vijay	Rao	35	Developer	M05	41000	Haridwar	4100

```
mysql> alter table emp modify column bonus int;
Query OK, 16 rows affected (0.40 sec)
Records: 16  Duplicates: 0  Warnings: 0
```

```
mysql> alter table emp drop column bonus;
Query OK, 0 rows affected (0.08 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> alter table emp change M_ID Manager_ID varchar(10);
Query OK, 0 rows affected (0.07 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> select * from emp;
```

Emp_ID	First_Name	Last_Name	age	Post	Manager_ID	Salary	city
E01	Arjun	Singh	55	Clerk	M01	45000	Dehradun
E02	Shiv	Mohan	35	Accountant	M01	30000	Kanpur
E03	Ram	Charan	55	AM	M02	44000	Lucknow
E04	Vikram	Singh	57	BM	M03	50000	Kanpur
E05	Singh	Vikas	53	Clerk	M04	35000	Dehradun
E06	Akhilesh	Rao	32	Accountant	M03	42000	Dehradun
E07	Akshay	Kumar	32	Trainer	M04	43000	Lucknow
E08	Vijay	Rao	35	Developer	M05	41000	Haridwar
E09	Vimal	Jalan	36	Clerk	M01	25000	Haridwar
E10	vijay	Jalan	36	Clerk	M02	25000	Haridwar
E11	Kamal	Kalash	65	Clerk	M03	90000	Dehradun
E12	AB	AC	65	Clerk	M03	90000	Dehradun
E13	AD	AB	65	Clerk	M03	90000	Dehradun
E14	AA	AA	65	Clerk	M03	90000	Dehradun
E15	Nikhil	NH	55	Student	M05	50000	Dehradun

Queries with limit

```
mysql> select*from employee order by salary asc;
```

Emp_ID	First_Name	last_Name	age	Post	Salary	city	basic
E005	Ayush	Barthwal	21	CA	20000	Dehradun	2000
E002	Jane	Smith	25	Analyst	50000	Los Angeles	5000
E003	David	Brown	28	Developer	55000	Chicago	5500
E004	Alice	Johnson	32	Designer	58000	San Francisco	5800
E001	John	Doe	30	Manager	60000	New York	6000

5 rows in set (0.00 sec)

```
mysql> select *from employee where city="Dehradun"limit 5;
```

Emp_ID	First_Name	last_Name	age	Post	Salary	city	basic
E005	Ayush	Barthwal	21	CA	20000	Dehradun	2000

1 row in set (0.00 sec)

```
mysql> select*from employee limit 2,3;
```

Emp_ID	First_Name	last_Name	age	Post	Salary	city	basic
E003	David	Brown	28	Developer	55000	Chicago	5500
E004	Alice	Johnson	32	Designer	58000	San Francisco	5800
E005	Ayush	Barthwal	21	CA	20000	Dehradun	2000

3 rows in set (0.00 sec)


```
mysql> select *from employee where city="Dehradun"limit 5;
```

Emp_ID	First_Name	last_Name	age	Post	Salary	city	basic
E005	Ayush	Barthwal	21	CA	20000	Dehradun	2000

1 row in set (0.00 sec)

```
mysql> select*from employee limit 2,3;
```

Emp_ID	First_Name	last_Name	age	Post	Salary	city	basic
E003	David	Brown	28	Developer	55000	Chicago	5500
E004	Alice	Johnson	32	Designer	58000	San Francisco	5800
E005	Ayush	Barthwal	21	CA	20000	Dehradun	2000

3 rows in set (0.00 sec)

```
mysql> select*from employee order by salary desc limit 2,1;
```

Emp_ID	First_Name	last_Name	age	Post	Salary	city	basic
E003	David	Brown	28	Developer	55000	Chicago	5500

1 row in set (0.00 sec)

