

1.

```
mysql> create table student(name varchar(20),age int ,course varchar(20),city  
varchar(20),year int,percentage int);
```

Query OK, 0 rows affected (0.01 sec)

2.

```
mysql> create table teacher(name varchar(20),age int ,course varchar(20),city  
varchar(20),subject_expert varchar(10),year_of_experience int , salary int);
```

Query OK, 0 rows affected (0.00 sec)

Insert 8 records into student table

```
mysql> insert into student values("akshaya",22,"java","aurangabad",2022,80);
```

Query OK, 1 row affected (0.01 sec)

```
mysql> insert into student values("purva",20,"dbms","pune",2002,90);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> insert into student values("aditi",26,"python","pune",2002,70);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> insert into student values("mayuri",26,"python","Mumbai",2012,76);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> insert into student values("rushu",19,"oracle","Mumbai",2000,56);
```

Query OK, 1 row affected (0.01 sec)

```
mysql> insert into student values("Ankit",29,"C","Mumbai",2000,56);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> insert into student values("pratik",20,"C++","pune",2018,95);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> insert into student values("shubham",30,"C++","Jalna",2023,97);
```

Query OK, 1 row affected (0.00 sec)

Insert 8 records into Teacher table

```
mysql> insert into teacher
```

```
values("Amruta",30,"C++","ahmedabad","C++",5,15000);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> insert into teacher
```

```
values("rakhi",30,"sql","ahmedabad","java",7,25000);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> insert into teacher values("bhakti",35,"python","pune","adv  
java",8,25000);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> insert into teacher values("bhagat",38,"python","Jalna","adv  
java",10,35000);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> insert into teacher  
values("deshmukh",48,"python","Jalna","dbms",20,95000);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> insert into teacher  
values("kolhe",8,"english","aurangabad","english",23,90000);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> insert into teacher  
values("joshi",8,"hindi","aurangabad","hindi",23,50000);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> insert into teacher  
values("deshpande",10,"marathi","mumbai","marathi",33,950000);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> select * from student;
```

name	age	course	city	year	percentage
akshaya	22	java	aurangabad	2022	80
purva	20	dbms	pune	2002	90
aditi	26	python	pune	2002	70
mayuri	26	python	Mumbai	2012	76
rushi	19	oracle	Mumbai	2000	56
Ankit	29	C	Mumbai	2000	56
pratik	20	C++	pune	2018	95
shubham	30	C++	Jalna	2023	97

8 rows in set (0.00 sec)

```
mysql> select * from teacher;
```

name	age	course	city	subject_expert	year_of_experience	salary
Amruta	30	C++	ahmedabad	C++	5	15000

rakhi	30	sql	ahmedabad	java		7	25000	
bhakti	35	python	pune	adv java		8	25000	
bhagat	38	python	Jalna	adv java		10	35000	
deshमुख	48	python	Jalna	dbms		20	95000	
kolhe	8	english	aurangabad	english		23	90000	
joshi	8	hindi	aurangabad	hindi		23	50000	
deshपान्दे	10	marathi	mumbai	marathi		33	950000	

```
+-----+-----+-----+-----+-----+-----+-----+
```

8 rows in set (0.00 sec)

4.

```
mysql> create table bkup_student select * from student;
```

Query OK, 8 rows affected (0.01 sec)

Records: 8 Duplicates: 0 Warnings: 0

```
mysql> create table bkup_teacher select * from teacher;
```

Query OK, 8 rows affected (0.01 sec)

Records: 8 Duplicates: 0 Warnings: 0

5.

```
mysql> select * from student where city ="pune" and city="Mumbai"
```

```
-> ;
```

Empty set (0.00 sec)

```
mysql> select * from student where city ="pune" || city="Mumbai";
```

```
+-----+-----+-----+-----+-----+-----+
```

name	age	course	city	year	percentage	
------	-----	--------	------	------	------------	--

```
+-----+-----+-----+-----+-----+-----+
```

purva	20	dbms	pune	2002		90	
-------	----	------	------	------	--	----	--

aditi	26	python	pune	2002		70	
-------	----	--------	------	------	--	----	--

mayuri	26	python	Mumbai	2012		76	
--------	----	--------	--------	------	--	----	--

rushi	19	oracle	Mumbai	2000		56	
-------	----	--------	--------	------	--	----	--

Ankit	29	C	Mumbai	2000		56	
-------	----	---	--------	------	--	----	--

pratik	20	C++	pune	2018		95	
--------	----	-----	------	------	--	----	--

```
+-----+-----+-----+-----+-----+-----+
```

6 rows in set, 1 warning (0.00 sec)

6.

```
mysql> select * from teacher where city ="ahmedabad" and name like "A%"
-> ;
```

name	age	course	city	subject_expert	year_of_experience	salary
Amruta	30	C++	ahmedabad	C++	5	15000

1 row in set (0.00 sec)

7.

```
mysql> select * from teacher where year_of_experience >=4;
```

name	age	course	city	subject_expert	year_of_experience	salary
Amruta	30	C++	ahmedabad	C++	5	15000
rakhi	30	sql	ahmedabad	java	7	25000
bhakti	35	python	pune	adv java	8	25000
bhagat	38	python	Jalna	adv java	10	35000
deshmukh	48	python	Jalna	dbms	20	95000
kolhe	8	english	aurangabad	english	23	90000
joshi	8	hindi	aurangabad	hindi	23	50000
deshpande	10	marathi	mumbai	marathi	33	950000

8 rows in set (0.00 sec)

8.

```
mysql> select city , count(city) from student group by city ;
```

city	count(city)
aurangabad	1
pune	3
Mumbai	3
Jalna	1

4 rows in set (0.00 sec)

9.

gggregated column 'test.student.city'; this is incompatible with sql_mode=only_full_group_by

```
mysql> select city , count(city) from student group by city ;
```

city	count(city)
aurangabad	1
pune	3
Mumbai	3

```
| Jalna | 1 |
+-----+-----+
4 rows in set (0.00 sec)
```

11.

```
mysql> create table backup_stru like student;
```

```
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> desc backup_stru;
```

```
+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| student_id | int | NO | PRI | NULL | |
| name | varchar(20) | YES | | NULL | |
| age | int | YES | | NULL | |
| course | varchar(20) | YES | | NULL | |
| city | varchar(20) | YES | | NULL | |
| year | int | YES | | NULL | |
| percentage | int | YES | | NULL | |
| teacher_id | int | YES | | NULL | |
+-----+-----+-----+-----+-----+
```

```
8 rows in set (0.00 sec)
```

```
mysql> select * from backup_stru;
```

```
Empty set (0.00 sec)
```

```
mysql> create table backup_stru_teacher like teacher;
```

```
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> desc backup_stru_teacher;
```

```
+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| teacher_id | int | NO | PRI | NULL | |
| name | varchar(20) | YES | | NULL | |
| age | int | YES | | NULL | |
| course | varchar(20) | YES | | NULL | |
| city | varchar(20) | YES | | NULL | |
| subject_expert | varchar(10) | YES | | NULL | |
| year_of_experience | int | YES | | NULL | |
| salary | int | YES | | NULL | |
+-----+-----+-----+-----+-----+
```

```
8 rows in set (0.00 sec)
```

12

```
mysql> CREATE TABLE example_table (
```

```
-> id INT AUTO_INCREMENT PRIMARY KEY,
```

```
-> name VARCHAR(255),
```

```
-> url BLOB
```

```
-> );
```

Query OK, 0 rows affected (0.01 sec)

```
mysql> CREATE TABLE blob_table ( id INT AUTO_INCREMENT PRIMARY KEY, name  
VARCHAR(255), url BLOB );
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> INSERT INTO example_table (name, url) VALUES ('Example Website',  
'http://www.example.com');
```

Query OK, 1 row affected (0.01 sec)

```
mysql> INSERT INTO blob_table(name, url) VALUES (' Website google', 'https://www.google.com/');
```

Query OK, 1 row affected (0.00 sec)

```
mysql>
```