

Primary Key and Not Null

```
use syl_student_;
Create table emp(
id int primary key auto_increment,
ename varchar(100) not null,
email varchar(100),
phone bigint not null,
salary int not null,
city varchar(100) not null
);
insert into emp(ename, email, phone, salary, city) values ("rahul", "rahul@gmail.com", 897568978,
35000, "miraj"),
("akash", "akash@gmail.com", 8955978985, 25000, "sangli"),
("sonu", "sonu@gmail.com", 8478965897, 45000, "kavlapur"),
("nidhi", "nidhi@gmail.com", 9751458789, 50000, "bisur"),
("tejas", "tejas@gmail.com", 5456445978, 55000, "bisur");

select * from emp;
```

Output:-

id	ename	email	phone	salary	city
1	rahul	rahul@gmail.com	897568978	35000	miraj
2	akash	akash@gmail.com	8955978985	25000	sangli
3	sonu	sonu@gmail.com	8478965897	45000	kavlapur
4	nidhi	nidhi@gmail.com	9751458789	50000	bisur
5	tejas	tejas@gmail.com	5456445978	55000	bisur

5 rows in set (0.001 sec)

Not Null with Error:-

```
insert into emp(ename, email, phone, city) values ("leyona", "leyona@gmail.com", 880935000,
"miraj");
```

Output :-

```
MariaDB [db]> insert into emp(ename, email, phone, city) values ("leyona",
"leyona@gmail.com", 880935000, "miraj");
ERROR 1364 (HY000): Field 'salary' doesn't have a default value
```

Primary Key with error :-

```
insert into emp(id, ename, email, phone,salary, city) values (null,"leyona", "leyona@gmail.com",  
880935000, 50000, "miraj");
```

Output :-

```
MariaDB [db]> insert into emp(id, ename, email, phone,salary, city) values (null,  
"leyona", "leyona@gmail.com",880935000, 50000, "miraj");  
ERROR 1048 (23000): Column 'id' cannot be null  
MariaDB [db]>
```

Foreign Key

```
create table clients(  
c_id int primary key,  
c_name varchar(100) not null  
);
```

```
insert into clients values (4, 'sanjana'),  
(5, 'rohan'),  
(6, 'arun');
```

```
select * from clients;
```

```
create table project(  
p_id int primary key,  
e_id int ,  
c_id int,  
p_date Date ,  
foreign key (e_id) references emp(id),  
foreign key (c_id) references clients(c_id)  
);
```

```
insert into project values (2345, 1, 4, 20120126),  
(9876, 2, 5, 20190228),  
(3455, 3, 6, 20171012);
```

```
select * from project;
```

Output :-

```
MariaDB [db]> select * from clients;
```

```
+-----+-----+
| c_id | c_name |
+-----+-----+
|    4 | sanjana |
|    5 | rohan   |
|    6 | arun    |
+-----+-----+
```

```
3 rows in set (0.000 sec)
```

```
MariaDB [db]> select * from project;
```

```
+-----+-----+-----+-----+
| p_id | e_id | c_id | p_date |
+-----+-----+-----+-----+
| 2345 |    1 |    4 | 2012-01-26 |
| 3455 |    3 |    6 | 2017-10-12 |
| 9876 |    2 |    5 | 2019-02-28 |
+-----+-----+-----+-----+
```

```
3 rows in set (0.000 sec)
```

Foreign Key with no values existing in reference table :-

insert into project values (235, 1, 3, 20120120);

Output :-

```
MariaDB [db]> insert into project values (235, 1, 3, 20120120);
```

```
ERROR 1452 (23000): Cannot add or update a child row: a foreign key constraint fails
(`db`.`project`, CONSTRAINT `project_ibfk_2` FOREIGN KEY (`c_id`) REFERENCES `clients`
(`c_id`))
```

```
MariaDB [db]>
```