

```
mysql> CREATE TABLE department(did INT PRIMARY KEY, name VARCHAR(20), loacation VARCHAR(20));
Query OK, 0 rows affected (0.397 sec)
```

```
mysql> INSERT INTO department VALUES(1,'engineering','new york'),(2,'marketing','pune'),(3,'HR','mumbai');
Query OK, 3 rows affected (0.142 sec)
Records: 3 Duplicates: 0 Warnings: 0
```

```
mysql> SELECT * FROM department;
```

did	name	loacation
1	engineering	new york
2	marketing	pune
3	HR	mumbai

```
3 rows in set (0.012 sec)
```

```
mysql> CREATE TABLE employees(eid INT PRIMARY KEY, name VARCHAR(10), did INT, salary INT, FOREIGN KEY (did) REFERENCES department(did));
Query OK, 0 rows affected (0.749 sec)
```

```
mysql> SELECT * FROM employees;
Empty set (0.027 sec)
```

```
mysql> INSERT INTO employees VALUES(101,'jony',1,70000),(102,'alice',2,48000),(103,'charle',(),());
'> INSERT INTO employees VALUES(101,'jony',1,70000),(102,'alice',2,48000),(103,'charlie',1,50000),(104,3,'bob',30000),(105,'rony',2,55000);
'> ';
```

```
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 'jony',1,70000),(102,'alice',2,48000),(103,'charlie',1,50000),(104,3,'bob',30000)' at line 2
```

```
mysql> INSERT INTO employees VALUES(101,'jony',1,70000),(102,'alice',2,48000),(103,'charlie',1,50000),(104,3,'bob',30000),(105,'rony',2,55000);
```

```
ERROR 1366 (HY000): Incorrect integer value: 'bob' for column 'did' at row 4
```

```
mysql> INSERT INTO employees VALUES(101,'jony',1,70000),(102,'alice',2,48000),(103,'charlie',1,50000),(104,'bob',3,30000),(105,'rony',2,55000);
```

```
Query OK, 5 rows affected (0.145 sec)
Records: 5 Duplicates: 0 Warnings: 0
```

```
mysql> SELECT * FROM employees;
```

```
+-----+-----+-----+
| eid | name  | did | salary |
+-----+-----+-----+
| 101 | jony  | 1   | 70000  |
| 102 | alice | 2   | 48000  |
| 103 | charlie | 1   | 50000  |
| 104 | bob   | 3   | 30000  |
| 105 | rony  | 2   | 55000  |
+-----+-----+-----+
5 rows in set (0.013 sec)
```

```
mysql> SELECT name,salary FROM employees WHERE salary>(SELECT AVG(salary) FROM employees);
```

name	salary
jony	70000
rony	55000

```
2 rows in set (0.104 sec)
```

```
mysql> SELECT name FROM employees e1 WHERE salary>(SELECT AVG(salary) FROM employees e2 WHERE e1.did=e2.did);
```

name
jony
rony

```
2 rows in set (0.013 sec)
```

```
mysql> SELECT name FROM employees WHERE did IN (SELECT did FROM department WHERE location='new york');
```

```
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 '' at line 1
```

```
mysql> SELECT name FROM employees WHERE did IN (SELECT did FROM department WHERE location='new york');
```

```
ERROR 1054 (42S22): Unknown column 'location' in 'where clause'
```

```
mysql> SELECT name FROM employees WHERE did IN (SELECT did FROM department WHERE loacation='new york');
```

name
jony
charlie

```
2 rows in set (0.014 sec)
```

```
mysql> SELECT did, AVG (salary) AS avg_salary FROM( SELECT did, salary FROM employees WHERE salary >50000) AS high_earners GROUP BY  
id;
```

did	avg_salary
1	70000.0000
2	55000.0000

```
2 rows in set (0.031 sec)
```