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Class :TE3


```
mysql> create index ind1 on Student(sname);
Query OK, 0 rows affected (0.08 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> show index from Student\n;
PAGER set to stdout
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
| Table | Non_unique | Key_name | Seq_in_index | Column_name | Collation | Cardinality | Sub_part | Packed | Null | Index_type | Comment | Index_comment |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
| Student | 0 | PRIMARY | 1 | s_id | A | 7 | NULL | NULL | | BTREE |
| | | |
| Student | 1 | Drive_id | 1 | Drive_id | A | 7 | NULL | NULL | YES | BTREE |
| | | |
| Student | 1 | ind1 | 1 | sname | A | 7 | NULL | NULL | YES | BTREE |
| | | |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
3 rows in set (0.01 sec)
```

```
mysql> show index from Student;
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
| Table | Non_unique | Key_name | Seq_in_index | Column_name | Collation | Cardinality | Sub_part | Packed | Null | Index_type | Comment | Index_comment |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
| Student | 0 | PRIMARY | 1 | s_id | A | 7 | NULL | NULL | | BTREE |
| | | |
| Student | 1 | Drive_id | 1 | Drive_id | A | 7 | NULL | NULL | YES | BTREE |
| | | |
| Student | 1 | ind1 | 1 | sname | A | 7 | NULL | NULL | YES | BTREE |
| | | |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> show index from Student\G;
```

```
***** 1. row *****
```

Table: Student

Non_unique: 0
Key_name: PRIMARY
Seq_in_index: 1
Column_name: s_id
Collation: A
Cardinality: 7
Sub_part: NULL
Packed: NULL
Null:
Index_type: BTREE
Comment:

Index_comment:

***** 2. row *****

Table: Student

Non_unique: 1
Key_name: Drive_id
Seq_in_index: 1
Column_name: Drive_id
Collation: A
Cardinality: 7
Sub_part: NULL
Packed: NULL
Null: YES
Index_type: BTREE
Comment:

Index_comment:

***** 3. row *****

Table: Student

Non_unique: 1
Key_name: ind1
Seq_in_index: 1
Column_name: sname
Collation: A
Cardinality: 7
Sub_part: NULL
Packed: NULL
Null: YES
Index_type: BTREE
Comment:

Index_comment:

3 rows in set (0.00 sec)

ERROR:

No query specified

mysql> select * from Student;

```
+-----+-----+-----+-----+
| s_id | Drive_id | sname   | CGPA | sbranch |
+-----+-----+-----+-----+
```

0	2	Satyajeet	10	NULL
1	1	Saurav	10	Computer
2	1	Samruddhi	10	Computer
3	2	Shreyash	10	Computer
34	0	Ram	5	IT
41	2	Satyajeet	10	NULL
43	1	Satya	9.5	NULL

7 rows in set (0.00 sec)

```
mysql> show index from Student where ind1=0;;
ERROR 1054 (42S22): Unknown column 'ind1' in 'where clause'
ERROR:
No query specified
```

```
mysql> select * from Student where s_id=1;
+-----+-----+-----+-----+-----+
| s_id | Drive_id | sname | CGPA | sbranch |
+-----+-----+-----+-----+-----+
| 1 | 1 | Saurav | 10 | Computer |
+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

//unique index

```
mysql> create unique index ind2 on PlacementDrive (Drive_id);
Query OK, 0 rows affected (0.07 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> show index from PlacementDrive\G;
```

***** 1. row *****

```
Table: PlacementDrive
Non_unique: 0
Key_name: PRIMARY
Seq_in_index: 1
Column_name: Drive_id
Collation: A
Cardinality: 4
Sub_part: NULL
Packed: NULL
Null:
Index_type: BTREE
Comment:
Index_comment:
```

***** 2. row *****

```
Table: PlacementDrive
Non_unique: 0
Key_name: ind2
Seq_in_index: 1
Column_name: Drive_id
```

Collation: A
 Cardinality: 4
 Sub_part: NULL
 Packed: NULL
 Null:
 Index_type: BTREE
 Comment:
 Index_comment:
 2 rows in set (0.00 sec)

ERROR:
 No query specified

```
mysql> explain select * from student where sname="Saurav";
ERROR 1146 (42S02): Table 't31342db.student' doesn't exist
mysql> explain select * from Student where sname="Saurav";
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| id | select_type | table | type | possible_keys | key | key_len | ref | rows | Extra |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | SIMPLE | Student | ref | ind1 | ind1 | 23 | const | 1 | Using index condition |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

```
mysql> explain select * from Student where sname="Saurav"\G;
***** 1. row *****
      id: 1
  select_type: SIMPLE
        table: Student
         type: ref
possible_keys: ind1
          key: ind1
        key_len: 23
          ref: const
         rows: 1
       Extra: Using index condition
1 row in set (0.00 sec)
```

ERROR:
 No query specified

```
mysql> desc Training;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| T_id | int(10) | NO | PRI | NULL | |
| Tcompanyname | varchar(20) | YES | | NULL | |
| Tfee | bigint(10) | YES | | NULL | |
| Tyear | int(4) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
```

4 rows in set (0.00 sec)

```
mysql> create index ind3 on Training(T_id,Tcompanyname);
```

Query OK, 0 rows affected (0.08 sec)

Records: 0 Duplicates: 0 Warnings: 0

```
mysql> show index from Training\G;
```

***** 1. row *****

Table: Training

Non_unique: 0

Key_name: PRIMARY

Seq_in_index: 1

Column_name: T_id

Collation: A

Cardinality: 6

Sub_part: NULL

Packed: NULL

Null:

Index_type: BTREE

Comment:

Index_comment:

***** 2. row *****

Table: Training

Non_unique: 1

Key_name: ind3

Seq_in_index: 1

Column_name: T_id

Collation: A

Cardinality: 6

Sub_part: NULL

Packed: NULL

Null:

Index_type: BTREE

Comment:

Index_comment:

***** 3. row *****

Table: Training

Non_unique: 1

Key_name: ind3

Seq_in_index: 2

Column_name: Tcompanyname

Collation: A

Cardinality: 6

Sub_part: NULL

Packed: NULL

Null: YES

Index_type: BTREE

Comment:

Index_comment:

3 rows in set (0.00 sec)

ERROR:

No query specified

```
mysql> explain select * from Training where T_id=1 or T_id=2;
```

id	select_type	table	type	possible_keys	key	key_len	ref	rows	Extra
1	SIMPLE	Training	range	PRIMARY,ind3	PRIMARY	4	NULL	2	Using where

1 row in set (0.00 sec)

```
mysql> explain select * from Training where T_id=1 or T_id=2\G;
```

***** 1. row *****

id: 1

select_type: SIMPLE

table: Training

type: range

possible_keys: PRIMARY,ind3

key: PRIMARY

key_len: 4

ref: NULL

rows: 2

Extra: Using where

1 row in set (0.00 sec)

ERROR:

No query specified

```
mysql> show index from Training\G;
```

***** 1. row *****

Table: Training

Non_unique: 0

Key_name: PRIMARY

Seq_in_index: 1

Column_name: T_id

Collation: A

Cardinality: 6

Sub_part: NULL

Packed: NULL

Null:

Index_type: BTREE

Comment:

Index_comment:

***** 2. row *****

Table: Training

Non_unique: 1

Key_name: ind3

Seq_in_index: 1
Column_name: T_id
Collation: A
Cardinality: 6
Sub_part: NULL
Packed: NULL
Null:
Index_type: BTREE
Comment:
Index_comment:

***** 3. row *****

Table: Training
Non_unique: 1
Key_name: ind3
Seq_in_index: 2
Column_name: Tcompanyname
Collation: A
Cardinality: 6
Sub_part: NULL
Packed: NULL
Null: YES
Index_type: BTREE
Comment:

Index_comment:
3 rows in set (0.00 sec)

ERROR:
No query specified

Query OK, 7 rows affected (0.11 sec)
Records: 7 Duplicates: 0 Warnings: 0

mysql> select * from Student;

s_id	Drive_id	sname	CGPA	sbranch
0	2	Satyajeet	10	NULL
1	1	Saurav	10	Computer
2	1	Samruddhi	10	Computer
3	2	Shreyash	10	Computer
34	0	Ram	5	IT
41	2	Satyajeet	10	NULL
43	1	Satya	9.5	NULL

7 rows in set (0.00 sec)

mysql> insert into Student(Drive_id,sname,CGPA,sbranch) values(2,"Random",6,"Computer");
ERROR 1062 (23000): Duplicate entry '0' for key 'PRIMARY'

```
mysql> select * from Student;
```

s_id	Drive_id	sname	CGPA	sbranch
0	2	Satyajeet	10	NULL
1	1	Saurav	10	Computer
2	1	Samruddhi	10	Computer
3	2	Shreyash	10	Computer
34	0	Ram	5	IT
41	2	Satyajeet	10	NULL
43	1	Satya	9.5	NULL

```
mysql> CREATE TABLE student_name (id INT NOT NULL AUTO_INCREMENT,name CHAR(30) NOT NULL, PRIMARY KEY (id));
```

```
mysql> select  
-> * from student_name;  
Empty set (0.00 sec)
```

```
mysql> INSERT INTO student_name (name) VALUES ('Saurav'),('Harish'),('MONGO'),  
( 'Sam'),('Shyam'),('Ram');  
Query OK, 6 rows affected (0.01 sec)  
Records: 6 Duplicates: 0 Warnings: 0
```

```
mysql> select * from student_name;
```

id	name
1	Saurav
2	Harish
3	MONGO
4	Sam
5	Shyam
6	Ram

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

```
mysql> explain select * from stud_info;
```

id	select_type	table	type	possible_keys	key	key_len	ref	rows	Extra
1	SIMPLE	Student	ALL	NULL	NULL	NULL	NULL	7	Using where

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



```
mysql> explain select * from stud_info\G;
***** 1. row *****
```

```
id: 1
select_type: SIMPLE
table: Student
type: ALL
possible_keys: NULL
key: NULL
key_len: NULL
ref: NULL
rows: 7
Extra: Using where
1 row in set (0.00 sec)
```

ERROR:
No query specified

```
mysql> select * from stud_info;
+-----+-----+-----+-----+
| s_id | sname  | CGPA | Drive_id |
+-----+-----+-----+-----+
| 0 | Satya jeet | 10 | 2 |
| 1 | Saurav  | 10 | 1 |
| 2 | Samruddhi | 10 | 1 |
| 3 | Shreyash | 10 | 2 |
| 41 | Satya jeet | 10 | 2 |
| 43 | Satya   | 9.5 | 1 |
+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

```
mysql> select * from placement_record;
+-----+-----+-----+-----+
| Name    | CGPA | Branch | company_name |
+-----+-----+-----+-----+
| Satya jeet | 10 | NULL    | Google      |
| Saurav    | 10 | Computer | Amazon      |
| Samruddhi | 10 | Computer | Amazon      |
| Shreyash  | 10 | Computer | Google      |
| Ram       | 5  | IT      | Arista      |
| Satya jeet | 10 | NULL    | Google      |
| Satya     | 9.5 | NULL    | Amazon      |
+-----+-----+-----+-----+
7 rows in set (0.00 sec)
```

```
mysql>
```