

SQL

1)HOW DO WE USE THE DISTINCT STATEMENT? WHAT ARE ITS USE?

The SQL DISTINCT keyword removes all identical entries from the table. The SELECT command is combined with the term DISTINCT. When a database contains various duplicate records, only unique records are given when the DISTINCT keyword is used to retrieve those records.

USES:

to remove unnecessary entries and show a unique set of values.

SYNTAX:

```
→Select distinct column1  
From table_name;
```

```
→Select distinct * from table_name;
```

EXAMPLE

```
USE STUDENT;  
CREATE TABLE COL(  
    ID int,  
    REG_NO int,  
    NAME Varchar(20),  
    DEPT_ID Varchar(255));  
INSERT INTO COL VALUES (1, 12345, 'ABI', 'EEE');  
INSERT INTO COL VALUES (1, 12345, 'ABI', 'EEE');  
INSERT INTO COL VALUES (3, 12347, 'ADI', 'MECH');  
INSERT INTO COL VALUES (4, 12348, 'ABI', 'EIE');  
INSERT INTO COL VALUES (5, 12349, 'ABI', 'ECE');  
SELECT DISTINCT * FROM COL;  
SELECT DISTINCT NAME FROM COL;  
SELECT * FROM COL;
```

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator: Filter objects

SCHEMAS

- data
 - Tables
 - Views
 - Stored Procedures
 - Functions
- sys

SQL File 3* SQL File 4* SQL File 5*

```
7 DEPT_ID Varchar(255));
8 INSERT INTO COL VALUES (1, 12345, 'ABI', 'EEE');
9 INSERT INTO COL VALUES (1, 12345, 'ABI', 'EEE');
10 INSERT INTO COL VALUES (3, 12347, 'ADI', 'MECH');
11 INSERT INTO COL VALUES (4, 12348, 'ABI', 'EIE');
12 INSERT INTO COL VALUES (5, 12349, 'ABI', 'ECE');
13 SELECT DISTINCT * FROM COL;
14 SELECT * FROM COL;
```

Result Grid

ID	REG_NO	NAME	DEPT_ID
1	12345	ABI	EEE
1	12345	ABI	EEE
3	12347	ADI	MECH
4	12348	ABI	EIE
5	12349	ABI	ECE

Information: COL 3 x

No object selected

Output

#	Time	Action	Message	Duration / Fetch
88	09:46:15	INSERT INTO COL VALUES (3, 12347, 'ADI', 'MECH')	1 row(s) affected	0.047 sec
89	09:46:15	INSERT INTO COL VALUES (4, 12348, 'ABI', 'EIE')	1 row(s) affected	0.031 sec
90	09:46:15	INSERT INTO COL VALUES (5, 12349, 'ABI', 'ECE')	1 row(s) affected	0.047 sec
91	09:46:18	SELECT * FROM COL	5 row(s) returned	0.000 sec / 0.000 sec
92	09:46:24	SELECT DISTINCT * FROM COL	4 row(s) returned	0.000 sec / 0.000 sec
93	09:47:14	SELECT * FROM COL	5 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

Type here to search

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Navigator: Filter objects

SCHEMAS

- data
 - Tables
 - Views
 - Stored Procedures
 - Functions
- sys

SQL File 3* SQL File 4* SQL File 5*

```
7 DEPT_ID Varchar(255));
8 INSERT INTO COL VALUES (1, 12345, 'ABI', 'EEE');
9 INSERT INTO COL VALUES (1, 12345, 'ABI', 'EEE');
10 INSERT INTO COL VALUES (3, 12347, 'ADI', 'MECH');
11 INSERT INTO COL VALUES (4, 12348, 'ABI', 'EIE');
12 INSERT INTO COL VALUES (5, 12349, 'ABI', 'ECE');
13 SELECT DISTINCT * FROM COL;
14 SELECT DISTINCT NAME FROM COL;
```

Result Grid

NAME
ABI
ADI

Information: COL 4 x

No object selected

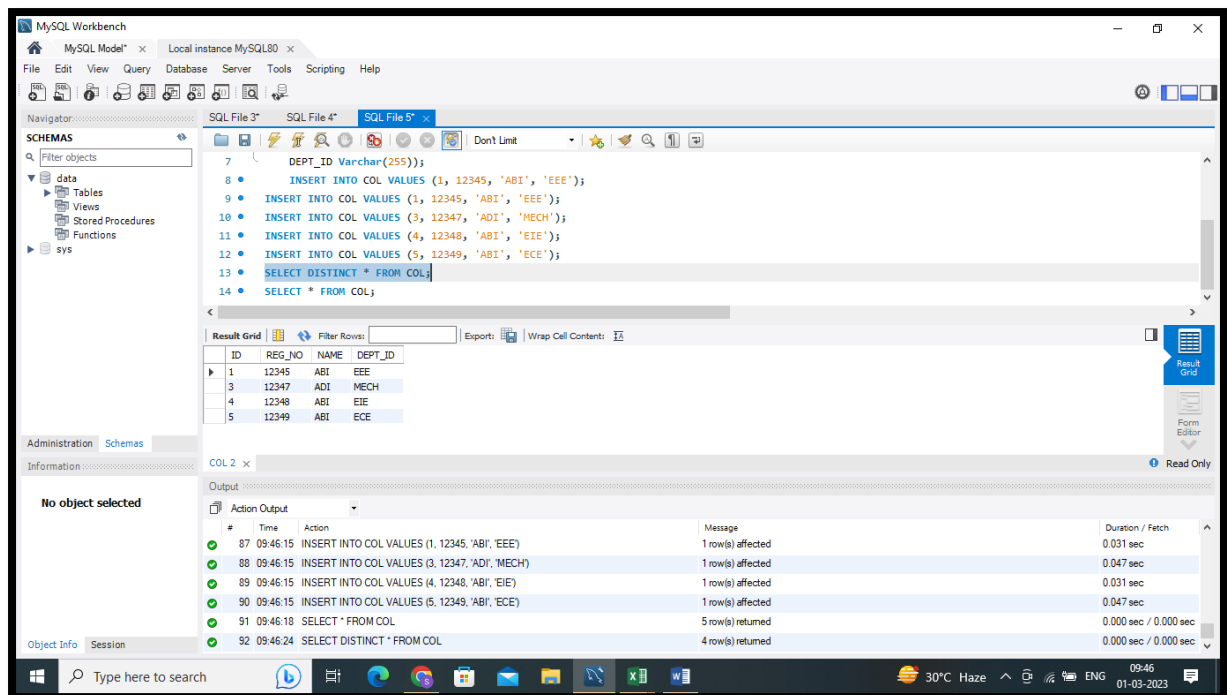
Output

#	Time	Action	Message	Duration / Fetch
89	09:46:15	INSERT INTO COL VALUES (4, 12348, 'ABI', 'EIE')	1 row(s) affected	0.031 sec
90	09:46:15	INSERT INTO COL VALUES (5, 12349, 'ABI', 'ECE')	1 row(s) affected	0.047 sec
91	09:46:18	SELECT * FROM COL	5 row(s) returned	0.000 sec / 0.000 sec
92	09:46:24	SELECT DISTINCT * FROM COL	4 row(s) returned	0.000 sec / 0.000 sec
93	09:47:14	SELECT * FROM COL	5 row(s) returned	0.000 sec / 0.000 sec
94	09:48:15	SELECT DISTINCT NAME FROM COL	2 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

Type here to search

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2)PRINT MAX SALARY FOR A PARTICULAR DEPARTMENT

SYNTAX:

Select max() from table_name;

EXAMPLE:

USE STUDENT;

CREATE TABLE EMP(

ID int,

SALARY int,

NAME Varchar(20),

DEPT_ID Varchar(255));

INSERT INTO EMP VALUES (1, 40000, 'SITA', 'MANAGER');

INSERT INTO EMP VALUES (2, 38000, 'TEENA', 'TEST LEAD');

INSERT INTO EMP VALUES (3, 36000, 'YUVANA', 'TESTER 1');

INSERT INTO EMP VALUES (4, 36000, 'ZARA', 'TESTER 2');

INSERT INTO EMP VALUES (5, 37000, 'RITA', 'DEVELOPER');

SELECT * FROM EMP;

SELECT MAX(SALARY) FROM EMP;

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Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator: SQL File 3* SQL File 4* SQL File 5* SQL File 6* SQL File 7*

SCHEMAS

Filter objects

data

Tables

Views

Stored Procedures

Functions

sys

Administration Schemas

Information

No object selected

Object Info Session

SQL File 7*

```
5 NAME Varchar(20),
6 DEPT_ID Varchar(255));
7 INSERT INTO EMP VALUES (1, 40000, 'SITA', 'MANAGER');
8 INSERT INTO EMP VALUES (2, 38000, 'TEENA', 'TEST LEAD');
9 INSERT INTO EMP VALUES (3, 36000, 'YUVANA', 'TESTER 1');
10 INSERT INTO EMP VALUES (4, 36000, 'ZARA', 'TESTER 2');
11 INSERT INTO EMP VALUES (5, 37000, 'RITA', 'DEVELOPER');
12 SELECT * FROM EMP;
```

Result Grid

ID	SALARY	NAME	DEPT_ID
1	40000	SITA	MANAGER
2	38000	TEENA	TEST LEAD
3	36000	YUVANA	TESTER 1
4	36000	ZARA	TESTER 2
5	37000	RITA	DEVELOPER

Output

EMP 1 x

Action Output

#	Time	Action	Message	Duration / Fetch
113	10:00:39	INSERT INTO EMP VALUES (1, 40000, 'SITA', 'MANAGER')	1 row(s) affected	0.031 sec
114	10:00:39	INSERT INTO EMP VALUES (2, 38000, 'TEENA', 'TEST LEAD')	1 row(s) affected	0.031 sec
115	10:00:39	INSERT INTO EMP VALUES (3, 36000, 'YUVANA', 'TESTER 1')	1 row(s) affected	0.031 sec
116	10:00:39	INSERT INTO EMP VALUES (4, 36000, 'ZARA', 'TESTER 2')	1 row(s) affected	0.031 sec
117	10:00:40	INSERT INTO EMP VALUES (5, 37000, 'RITA', 'DEVELOPER')	1 row(s) affected	0.031 sec
118	10:00:43	SELECT * FROM EMP	5 row(s) returned	0.000 sec / 0.000 sec

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10:00

01-03-2023

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File Edit View Query Database Server Tools Scripting Help

Navigator: SQL File 3* SQL File 4* SQL File 5* SQL File 6* SQL File 7*

SCHEMAS

Filter objects

data

Tables

Views

Stored Procedures

Functions

sys

Administration Schemas

Information

No object selected

Object Info Session

SQL File 7*

```
6 DEPT_ID Varchar(255));
7 INSERT INTO EMP VALUES (1, 40000, 'SITA', 'MANAGER');
8 INSERT INTO EMP VALUES (2, 38000, 'TEENA', 'TEST LEAD');
9 INSERT INTO EMP VALUES (3, 36000, 'YUVANA', 'TESTER 1');
10 INSERT INTO EMP VALUES (4, 36000, 'ZARA', 'TESTER 2');
11 INSERT INTO EMP VALUES (5, 37000, 'RITA', 'DEVELOPER');
12 SELECT * FROM EMP;
13 SELECT MAX(SALARY) FROM EMP;
```

Result Grid

MAX(SALARY)
40000

Output

Result 2 x

Action Output

#	Time	Action	Message	Duration / Fetch
114	10:00:39	INSERT INTO EMP VALUES (2, 38000, 'TEENA', 'TEST LEAD')	1 row(s) affected	0.031 sec
115	10:00:39	INSERT INTO EMP VALUES (3, 36000, 'YUVANA', 'TESTER 1')	1 row(s) affected	0.031 sec
116	10:00:39	INSERT INTO EMP VALUES (4, 36000, 'ZARA', 'TESTER 2')	1 row(s) affected	0.031 sec
117	10:00:40	INSERT INTO EMP VALUES (5, 37000, 'RITA', 'DEVELOPER')	1 row(s) affected	0.031 sec
118	10:00:43	SELECT * FROM EMP	5 row(s) returned	0.000 sec / 0.000 sec
119	10:01:10	SELECT MAX(SALARY) FROM EMP	1 row(s) returned	0.000 sec / 0.000 sec

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10:01

01-03-2023