

SQL: Delete duplicate rows from a table when there is no primary key in the table

Published 1/13/2014 by [Raghav Khunger](#)

In this blog I will help you how to delete duplicate rows from a table where there is no primary key in the table. Below is the script to insert data:

```
CREATE TABLE MyTable
(
    Col1 INT ,
    Col2 VARCHAR(10) ,
    Col3 VARCHAR(11)
);

GO

INSERT INTO MyTable
VALUES ( 1, 'Jack', '555-55-5555' );
INSERT INTO MyTable
VALUES ( 2, 'Joe', '555-56-5555' );
INSERT INTO MyTable
VALUES ( 3, 'Fred', '555-57-5555' );
INSERT INTO MyTable
VALUES ( 4, 'Mike', '555-58-5555' );
INSERT INTO MyTable
VALUES ( 5, 'Cathy', '555-59-5555' );
INSERT INTO MyTable
VALUES ( 6, 'Lisa', '555-70-5555' );
INSERT INTO MyTable
VALUES ( 1, 'Jack', '555-55-5555' );
INSERT INTO MyTable
VALUES ( 4, 'Mike', '555-58-5555' );
INSERT INTO MyTable
VALUES ( 5, 'Cathy', '555-59-5555' );
INSERT INTO MyTable
VALUES ( 6, 'Lisa', '555-70-5555' );
INSERT INTO MyTable
VALUES ( 5, 'Cathy', '555-59-5555' );
INSERT INTO MyTable
VALUES ( 6, 'Lisa', '555-70-5555' );

GO
```

You will notice the duplicate rows above:

Col1	Col2	Col3
1	1	Jack 555-55-5555
2	2	Joe 555-56-5555
3	3	Fred 555-57-5555
4	4	Mike 555-58-5555
5	5	Cathy 555-59-5555
6	6	Lisa 555-70-5555
7	1	Jack 555-55-5555
8	4	Mike 555-58-5555
9	5	Cathy 555-59-5555
10	6	Lisa 555-70-5555
11	5	Cathy 555-59-5555
12	6	Lisa 555-70-5555

Solution:

The duplicate rows can be removed like this:

```
DELETE SUB
FROM ( SELECT ROW_NUMBER() OVER ( PARTITION BY Col1,
                                   Col2, Col3 ORDER BY Col1 ) cnt
      FROM MyTable
      ) SUB
WHERE SUB.Cnt > 1
```

After running the above query duplicate rows will be removed:

Col1	Col2	Col3
1	1	Jack 555-55-5555
2	2	Joe 555-56-5555
3	3	Fred 555-57-5555
4	4	Mike 555-58-5555
5	5	Cathy 555-59-5555
6	6	Lisa 555-70-5555

tags : Sql, sql-server