

How to split a single column values to multiple column values?



I have a problem splitting single column values to multiple column values.

22

For Example:



Name

abcd efgh
ijk lmn opq
asd j. asdjja
asb (asdfas) asd
asd



6

and I need the output something like this:

first_name	last_name

abcd	efgh
ijk	opq
asd	asdjja
asb	asd
asd	null

The middle name can be omitted (no need for a middle name) The columns are already created and need to insert the data from that single Name column.

[sql](#)[sql-server](#)[tsql](#)[string](#)

edited Jun 11 '15 at 8:51



ughai

9,059

3

21

43

asked Feb 25 '11 at 22:52



Shahsra

401

6

14

29

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Need that in a select statement. Actually it is for stored procedure which is inserting the data by selecting values from a table. So I get it in select statement that will be great... – [Shahsra](#) Feb 25 '11 at 23:00

6 Answers



Your approach won't deal with lot of names correctly but...

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```
SELECT CASE
    WHEN name LIKE '% %' THEN LEFT(name, Charindex(' ', name) - 1)
    ELSE name
END,
CASE
    WHEN name LIKE '% %' THEN RIGHT(name, Charindex(' ', Reverse(name)) - 1)
END
FROM YourTable
```

answered Feb 25 '11 at 23:05



[Martin Smith](#)

356k 60 595 708

I get the error : #1305 - FUNCTION preprodshem.Charindex does not exist. after some search I found that this function is not supported by mysql, and need some changes using : SUBSTRING_INDEX to resolve this. – [Mimouni](#) Sep 21 '16 at 10:09

2 @IlyasMimouni - this question is tagged SQL Server. – [Martin Smith](#) Sep 21 '16 at 10:41



An alternative to Martin's

13



```
select LEFT(name, CHARINDEX(' ', name + ' ') -1),
    STUFF(name, 1, Len(Name) +1- CHARINDEX(' ',Reverse(name)), '')
from somenames
```

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```

create table somenames (Name varchar(100))
insert somenames select 'abcd efgh'
insert somenames select 'ijk lmn opq'
insert somenames select 'asd j. asdjja'
insert somenames select 'asb (asdfas) asd'
insert somenames select 'asd'
insert somenames select ''
insert somenames select null

```

edited Feb 25 '11 at 23:29

answered Feb 25 '11 at 23:10



RichardTheKiwi

88.5k 22 160 232

So this query works for millions of values in that column I guess right.... – [Shahsra](#) Feb 25 '11 at 23:16

1 @Shahsra - Yes. By definition SQL is a SET-based language so what you do on one record is done on all records equally.. – [RichardTheKiwi](#) Feb 25 '11 at 23:18

This appears to just give the forename twice at the moment? – [Martin Smith](#) Feb 25 '11 at 23:21

thank you very much Richard...Really appreciate it.... – [Shahsra](#) Feb 25 '11 at 23:22

1 @Martin - thanks for catching it. Fixed now. No longer short :(– [RichardTheKiwi](#) Feb 25 '11 at 23:30

What you need is a split user-defined function. With that, the solution looks like

2

```

With SplitValues As
(
  Select T.Name, Z.Position, Z.Value
    , Row_Number() Over ( Partition By T.Name Order By Z.Position ) As Num
  From Table As T
    Cross Apply dbo.udf_Split( T.Name, ' ' ) As Z
)
Select Name
  , FirstName.Value
    Case When ThirdName Is Null Then SecondName Else ThirdName End As LastName

```

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```

And S2.Num = 3
Where FirstName.Num = 1

```

Here's a sample split function:

```

Create Function [dbo].[udf_Split]
(
    @DelimitedList nvarchar(max)
    , @Delimiter nvarchar(2) = ','
)
RETURNS TABLE
AS
RETURN
(
    With CorrectedList As
    (
        Select Case When Left(@DelimitedList, Len(@Delimiter)) <> @Delimiter Then
@Delimiter Else '' End
        + @DelimitedList
        + Case When Right(@DelimitedList, Len(@Delimiter)) <> @Delimiter Then
@Delimiter Else '' End
        As List
        , Len(@Delimiter) As DelimiterLen
    )
    , Numbers As
    (
        Select TOP( Coalesce(DataLength(@DelimitedList)/2,0) ) Row_Number() Over ( Order
By c1.object_id ) As Value
        From sys.columns As c1
        Cross Join sys.columns As c2
    )
    Select CharIndex(@Delimiter, CL.list, N.Value) + CL.DelimiterLen As Position
        , Substring (
            CL.List
            , CharIndex(@Delimiter, CL.list, N.Value) + CL.DelimiterLen
            , CharIndex(@Delimiter, CL.list, N.Value + 1)
            - ( CharIndex(@Delimiter, CL.list, N.Value) + CL.DelimiterLen )
        ) As Value
    From CorrectedList As CL
    Cross Join Numbers As N
    Where N.Value <= DataLength(CL.List) / 2

```

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answered Feb 25 '11 at 23:02



Thomas

56.9k 8 80 126

2

```
;WITH Split_Names (Name, xmlname)
AS
(
    SELECT
        Name,
        CONVERT(XML, '<Names><name>'
        + REPLACE(Name, ' ', '</name><name>') + '</name></Names>') AS xmlname
    FROM somenames
)

SELECT
    xmlname.value('/Names[1]/name[1]', 'varchar(100)') AS first_name,
    xmlname.value('/Names[1]/name[2]', 'varchar(100)') AS last_name
FROM Split_Names
```

and also check the link below for reference

<http://jahaines.blogspot.in/2009/06/converting-delimited-string-of-values.html>

answered Feb 27 '13 at 9:23



bvr

4,116 15 21

0

Here is how I did this on a SQLite database:

```
SELECT SUBSTR(name, 1, INSTR(name, " ") - 1) as Firstname,
SUBSTR(name, INSTR(name, " ") + 1, LENGTH(name)) as Lastname
FROM YourTable;
```

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**SELECT**

```
SUBSTRING_INDEX(SUBSTRING_INDEX(rent, ' ', 1), ' ', -1) AS currency,  
SUBSTRING_INDEX(SUBSTRING_INDEX(rent, ' ', 3), ' ', -1) AS rent
```

FROM tolets

edited Mar 12 '17 at 8:15



Fruchtzweg

6,728 12 28 37

answered Mar 12 '17 at 5:54



Md Shahadat Hossain

211 1 12

That's MySQL, not MS SQL – [AjV Jsy](#) Apr 11 at 9:39

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