

# SQL Server Tutorial

## Part 123 - TRY\_PARSE function in SQL Server 2012

Venkat

PRAGIM Technologies

[kudvenkat@gmail.com](mailto:kudvenkat@gmail.com)

<http://csharp-video-tutorials.blogspot.com>

PragimTech.com | facebook.com/pragimtech | twitter.com/kudvenkat | 91 99456 99393

# In this session we will learn

- TRY\_PARSE function
- Difference between PARSE and TRY\_PARSE functions

**Link to Dot Net Basics, ASP.NET, C#, ADO.NET and SQL Server video series**

<http://www.youtube.com/user/kudvenkat/playlists>

## **Suggested Videos**

**Part 120 - Reverse PIVOT table in SQL Server**

**Part 121 - Choose function in SQL Server**

**Part 122 - IIF function in SQL Server**

# TRY\_PARSE function in SQL Server 2012

If you are in need of the DVD with all the videos and PPT's, please visit

<http://pragimtech.com/order.aspx>

## TRY\_PARSE function

- Introduced in SQL Server 2012
- Converts a string to Date/Time or Numeric type
- Returns NULL if the provided string cannot be converted to the specified data type
- Requires .NET Framework Common Language Runtime (CLR)

**Syntax:** TRY\_PARSE ( string\_value AS data\_type )

**Example :** As the string can be converted to INT, the result will be 99

SELECT TRY_PARSE('99' AS INT) AS Result	→	<table><tr><th>Result</th></tr><tr><td>99</td></tr></table>	Result	99
Result				
99				

**Example :** As the string cannot be converted to INT, TRY\_PARSE returns NULL

SELECT TRY_PARSE('ABC' AS INT) AS Result	→	<table><tr><th>Result</th></tr><tr><td>NULL</td></tr></table>	Result	NULL
Result				
NULL				

# TRY\_PARSE function in SQL Server 2012

Use **CASE statement** or **IIF function** to provide a meaningful error message instead of NULL when the conversion fails

**Example :** Using CASE statement to provide a meaningful error message when the conversion fails

```
SELECT  
CASE WHEN TRY_PARSE('ABC' AS INT) IS NULL  
      THEN 'Conversion Failed'  
      ELSE 'Conversion Successful'  
END AS Result
```

Result
Conversion Failed

**Example :** Using IIF function to provide a meaningful error message when the conversion fails

```
SELECT IIF(TRY_PARSE('ABC' AS INT) IS NULL,  
          'Conversion Failed',  
          'Conversion Successful') AS Result
```

Result
Conversion Failed

# TRY\_PARSE function in SQL Server 2012

## What is the difference between PARSE and TRY\_PARSE

PARSE will result in an error if the conversion fails, where as TRY\_PARSE will return NULL instead of an error

Since ABC cannot be converted to INT, PARSE will return an error

```
SELECT PARSE('ABC' AS INT) AS Result
```



Msg 9819, Level 16, State 1, Line 1  
Error converting string value 'ABC' into data type int using culture ''.

Since ABC cannot be converted to INT, TRY\_PARSE will return NULL instead of an error

```
SELECT TRY_PARSE('ABC' AS INT) AS Result
```




Result
NULL

# TRY\_PARSE function in SQL Server 2012

**Example :** Using TRY\_PARSE() function with table data

```
SELECT Name, TRY_PARSE(Age AS INT) AS Age
FROM Employees
```



Id	Name	Age
1	Mark	40
2	John	20
3	Amy	THIRTY
4	Ben	21
5	Sara	FIFTY
6	David	25

Name	Age
Mark	40
John	20
Amy	NULL
Ben	21
Sara	NULL
David	25

**If you use PARSE instead of TRY\_PARSE, the query fails with an error**

```
SELECT NAME, PARSE(Age AS INT) AS Age
FROM Employees
```



Msg 9819, Level 16, State 1, Line 1  
Error converting string value 'THIRTY' into data type int using culture ''.

# Additional Resources

## PRAGIM Home Page:

[www.PragimTech.com](http://www.PragimTech.com)

## Resources:

C#, ADO.NET, ASP.NET, SQL Server & MVC youtube Playlists

<http://www.youtube.com/user/kudvenkat/playlists>

Code samples and text version of all the videos on my blog

<http://www.csharp-video-tutorials.blogspot.com>

To receive email alerts when new videos are uploaded, please subscribe to my YOUTUBE channel

[www.YouTube.com/kudvenkat](http://www.YouTube.com/kudvenkat)

<https://twitter.com/kudvenkat>