

Applies To:

Technologies - MaxDB

Article Summary

This article explains how to work with all SQLCLI commands. Screen shots are provided.

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Introduction to SQLCLI

SQLCLI is a database tool provided by MaxDB, using which database instances can be accessed using the SQL commands. This SQLCLI is a command line tool using which databases can be accessed interactively in local and remote systems.

SQLCLI provides the following two main functionalities,

1. Executes the SQL statements on the MaxDB Database instances
2. Execute a set of its own commands that provide additional information.

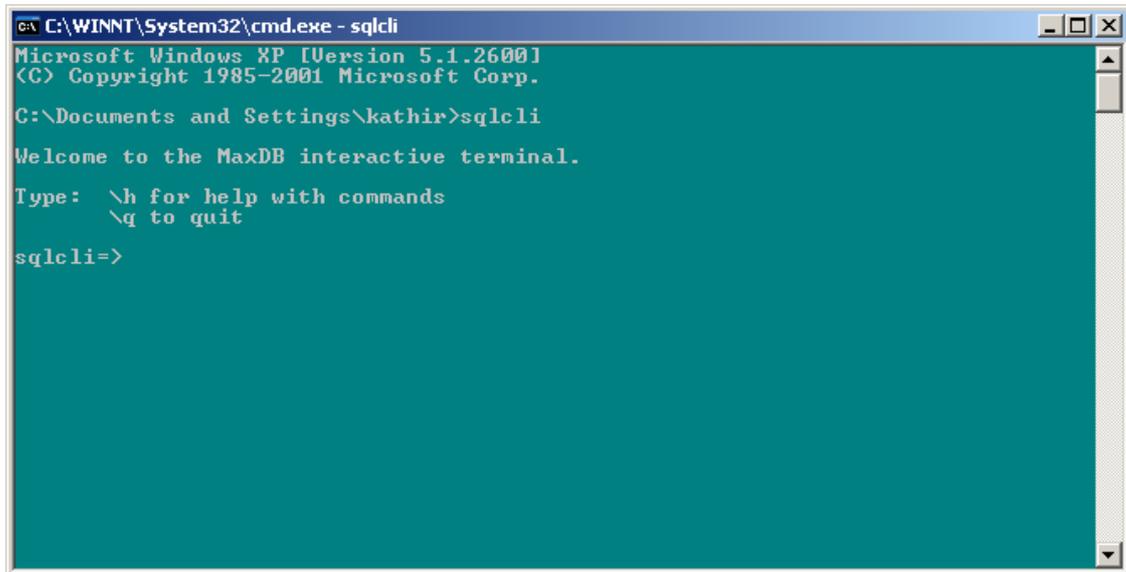
Logging on to Database using SQLCLI

There are many ways in which one can login to MaxDB using SQLCLI. They are shown below,

Method – 1

In this method we can just login into SQLCLI, but to proceed further we need a user name and password to perform other actions.

The command **SQLCLI** just opens the SQLCLI command line console



```
C:\WINNT\System32\cmd.exe - sqlcli
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\kathir>sqlcli

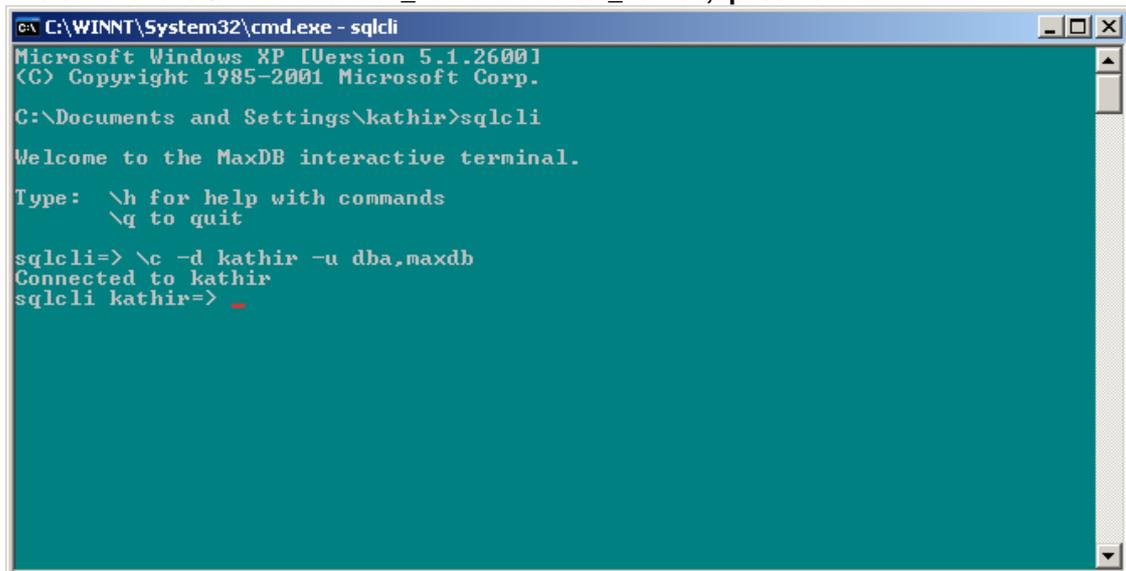
Welcome to the MaxDB interactive terminal.

Type:  \h for help with commands
        \q to quit

sqlcli=>
```

From here one can specify the connect statement for a database along with user name and password to login

The command is `\c -d <database_name> -u <user_name>,<password>`



```
C:\WINNT\System32\cmd.exe - sqlcli
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\kathir>sqlcli

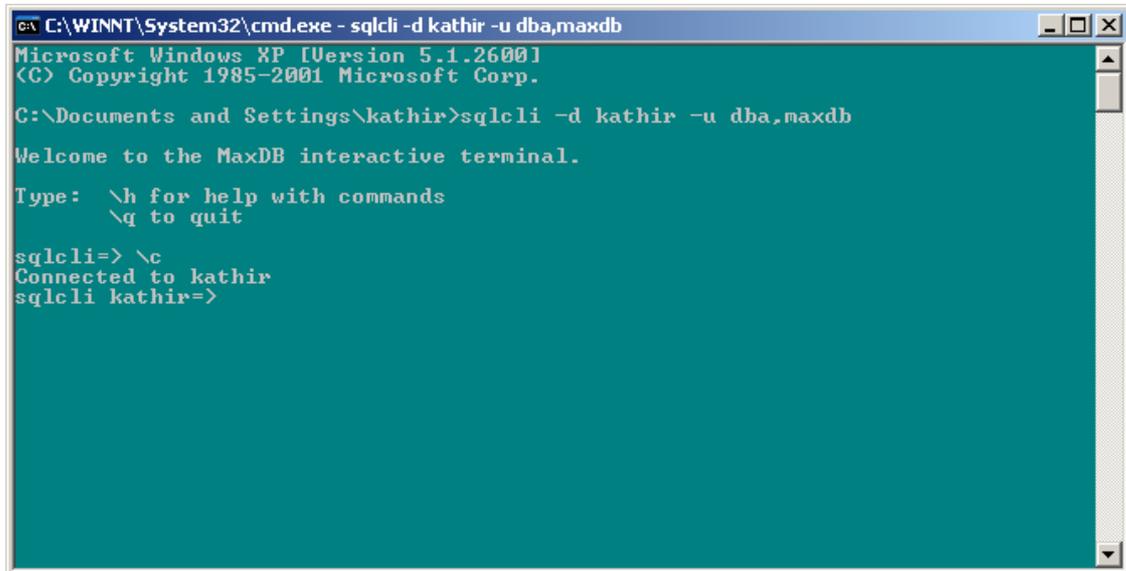
Welcome to the MaxDB interactive terminal.

Type:  \h for help with commands
        \q to quit

sqlcli=> \c -d kathir -u dba,maxdb
Connected to kathir
sqlcli kathir=> .
```

Method – 2

In this method we can login into SQLCLI with all the necessary information in one line, as **SQLCLI -d <database_name> -u <user_name>,<password>**. This will open the SQLCLI, then the command **\c** is executed to connect to the database instance.



```
C:\WINNT\System32\cmd.exe - sqlcli -d kathir -u dba,maxdb
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\kathir>sqlcli -d kathir -u dba,maxdb

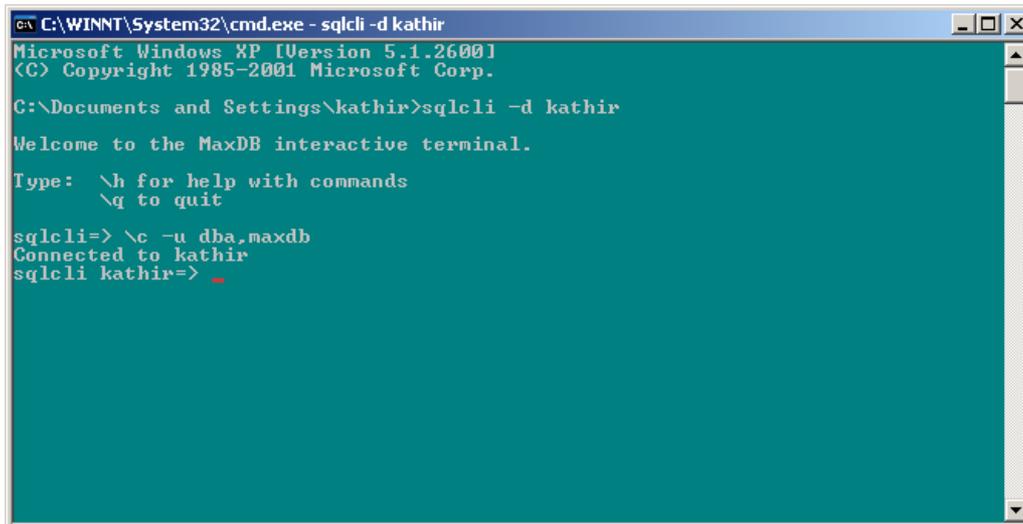
Welcome to the MaxDB interactive terminal.

Type:  \h for help with commands
       \q to quit

sqlcli=> \c
Connected to kathir
sqlcli kathir=>
```

Method – 3

In this method we can login into SQLCLI with the database, as **SQLCLI -d <database_name>**. This will open the SQLCLI, then the command **\c -u <user_name>,<password>** is executed so that the user is to connect to the database instance.



```
C:\WINNT\System32\cmd.exe - sqlcli -d kathir
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\kathir>sqlcli -d kathir
Welcome to the MaxDB interactive terminal.
Type: \h for help with commands
      \q to quit

sqlcli=> \c -u dba,maxdb
Connected to kathir
sqlcli kathir=> _
```

Working with SQLCLI Commands

The Help Command (\? Or \h)

This command displays the list of all commands that are supported by the SQLCLI. The \? Or \h can be used for the above purpose.

```
C:\WINNT\System32\cmd.exe - sqlcli -d kathir
sqlcli kathir=> \?

\? or \h[elp]  show help on internal slash commands
\q[uit]        quit SQLCLI
\c[onnect]     -n <database_server>[:<port>]
               -d <database_name>
               -u <user_name,password>
               connecting to the database
\di[sconnect]  disconnecting from the database

\al[utocommit] [ON|OFF] switch autocommit mode on or off
\m[ode]        [INTERNAL|ORACLE|ANSI|DB2] change SQL mode
\o[utput]      <filename> send all query results to file
\i[nput]       <filename> read input from the file <filename>

\p[rint]       print out the current query buffer
\r[eset]       reset <clear> the query buffer
\e[dit]        <filename> edit the query buffer <or file> with external edi

\g            send query buffer to server <and print out the results>

\al[ign]       [ON|OFF] toggle the aligned output on or off
\fl[ieldsep]  <separator> use <separator> as the field separator
\s[tatus]     print out host, database, user etc.
\!  
<command>    execute <command> in shell

\dc [PATTERN] list columns
\di [PATTERN] list indices
\dp [PATTERN] list procedures
\dt [PATTERN] list tables
\du [NAME]    list users
\dv [PATTERN] list views
[PATTERN] = [OWNER.] [OBJECT NAME] eg. <username>.%A%

sqlcli kathir=> -
```

Shell Command (\!)

This command helps to execute a shell script. Imagine that now the user is in SQLCLI, and needs the DBMCLI console to perform a modification, in such case this command is much helpful. The syntax is **\! <Shell Command>**

```
C:\WINNT\System32\cmd.exe - sqlcli
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\kathir>sqlcli

Welcome to the MaxDB interactive terminal.

Type:  \h for help with commands
       \q to quit

sqlcli=> \c -d kathir -u dba,maxdb
Connected to kathir
sqlcli kathir=> \! dbmcli -d kathir -u dbm,maxdb
dbmcli on kathir>
```

Auto commit Command (\a)

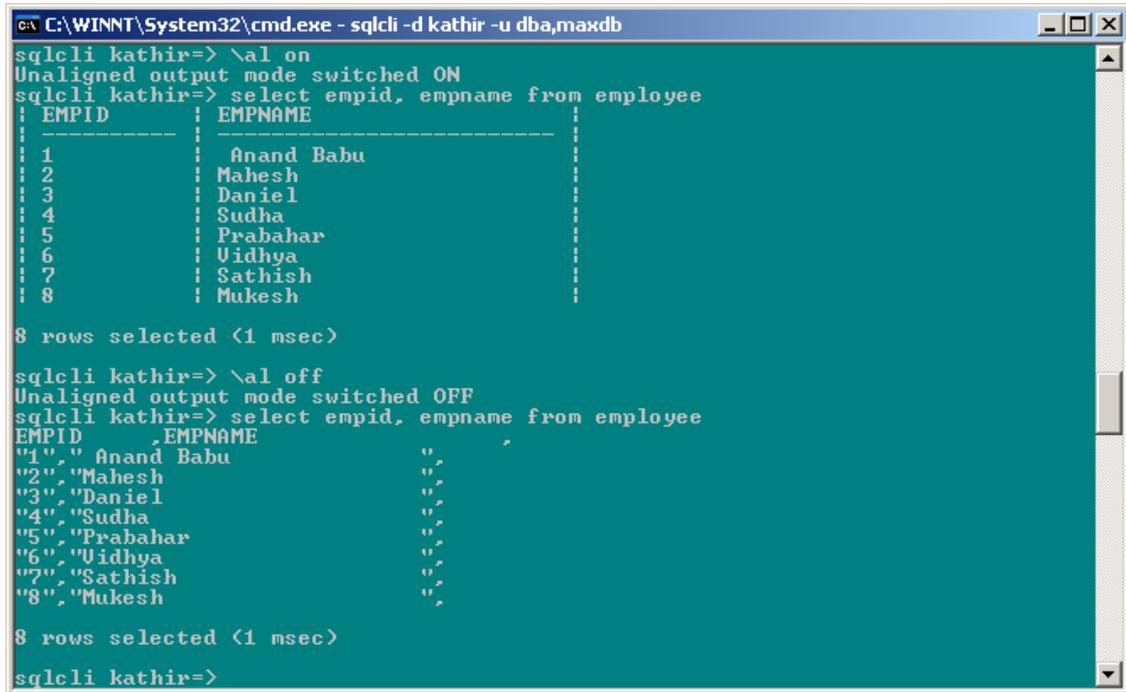
This command can activate and deactivate the auto commit mode of the SQLCLI.
The command **\a on** - activate auto commit and **\a off** - deactivates it.

```
C:\WINNT\System32\cmd.exe - sqlcli -d kathir -u dba,maxdb

sqlcli kathir=> \a off
Autocommit mode switched OFF
sqlcli kathir=> \a on
Autocommit mode switched ON
sqlcli kathir=> -
```

Align Command (\al)

The output of an executed query can be formatted using this align command. The command **\al on** – Activates it and the command **\al off** – Deactivates.



```
C:\WINNT\System32\cmd.exe - sqlcli -d kathir -u dba,maxdb
sqlcli kathir=> \al on
Unaligned output mode switched ON
sqlcli kathir=> select empid, empname from employee
EMPID      EMPNAME
-----
1          Anand Babu
2          Mahesh
3          Daniel
4          Sudha
5          Prabahar
6          Uidhya
7          Sathish
8          Mukesh

8 rows selected (1 msec)

sqlcli kathir=> \al off
Unaligned output mode switched OFF
sqlcli kathir=> select empid, empname from employee
EMPID      EMPNAME
"1", "Anand Babu
"2", "Mahesh
"3", "Daniel
"4", "Sudha
"5", "Prabahar
"6", "Uidhya
"7", "Sathish
"8", "Mukesh

8 rows selected (1 msec)
sqlcli kathir=>
```

Connect Command (\c)

This command is used to connect to a database instance. The syntax is **\c** , or **\c <database> -u <username>, <password>**

```

C:\WINNT\System32\cmd.exe - sqlcli -d kathir -u dba,maxdb
sqlcli=> \c kathir -u dba,maxdb
Connected to kathir
sqlcli kathir=>

```

Command for requesting information about Database objects

The command **\dc** is used to get the column information of a table. The syntax is **\dc <pattern>** where **pattern = <username>.<objectname>**.

The command **\de** is used to get the list of index object. The syntax is **\de <pattern>** where **pattern = <username>.<objectname>**.

```

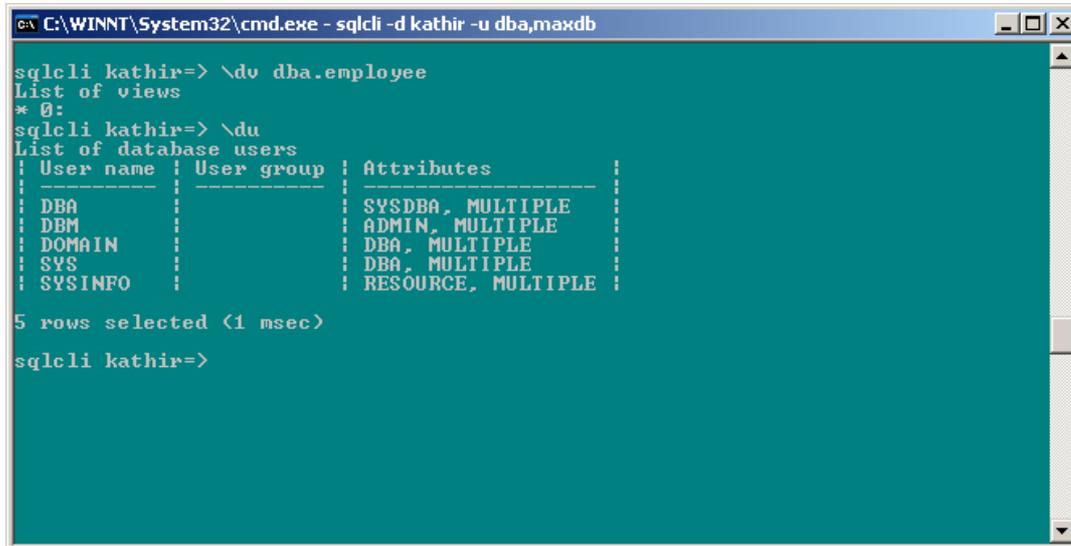
C:\WINNT\System32\cmd.exe - sqlcli -d kathir -u dba,maxdb
sqlcli kathir=> \dc dba.employee
Table "DBA.EMPLOYEE"
| Column Name | Type           | Length | Nullable | KEYPOS |
|-----|-----|-----|-----|-----|
| EMPID       | VARCHAR ASCII | 10     | NO      | 1      |
| EMPNAME     | CHAR ASCII    | 25     | YES     |        |
| EMPCITY     | CHAR ASCII    | 25     | YES     |        |
| EMPDEPT     | CHAR ASCII    | 20     | YES     |        |
| EMPSAL     | FIXED        | 8      | YES     |        |

sqlcli kathir=> \de dba.employee
List of indices Tablepattern "DBA.EMPLOYEE"
* 0:
sqlcli kathir=>

```

The command **\dv** is used to get the view information of a table. The syntax is **\dv <pattern>** where **pattern = <username>.<objectname>**.

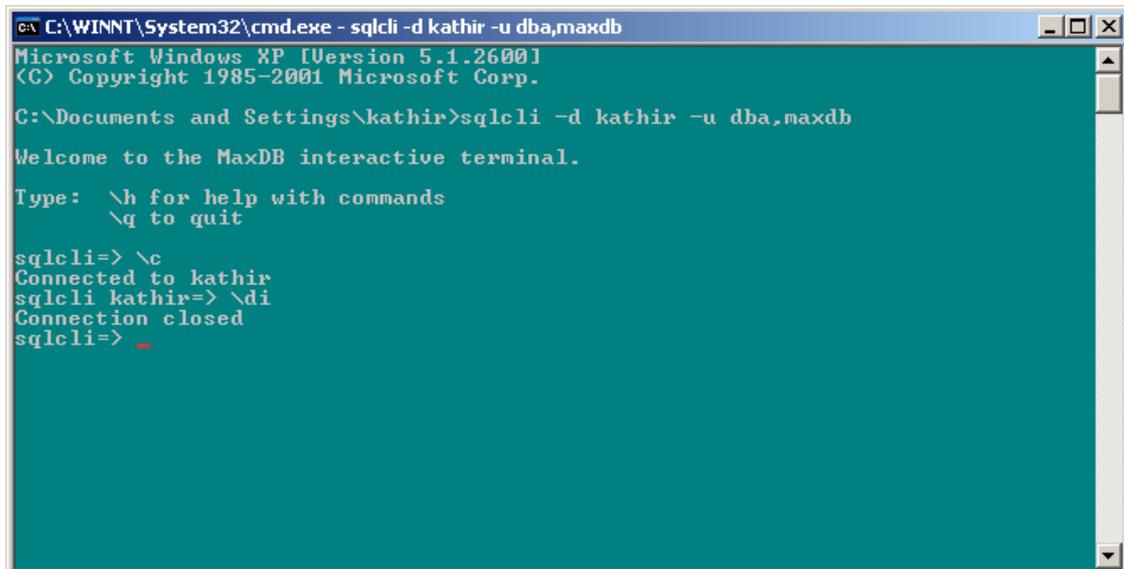
The command `\du` is used to get the list of user for the object. The syntax is `\du`.



```
C:\WINNT\System32\cmd.exe - sqlcli -d kathir -u dba,maxdb
sqlcli kathir=> \dv dba.employee
List of views
* Ø:
sqlcli kathir=> \du
List of database users
| User name | User group | Attributes |
|-----|-----|-----|
| DBA | | SYSDBA, MULTIPLE |
| DBM | | ADMIN, MULTIPLE |
| DOMAIN | | DBA, MULTIPLE |
| SYS | | DBA, MULTIPLE |
| SYSINFO | | RESOURCE, MULTIPLE |
5 rows selected (1 msec)
sqlcli kathir=>
```

Connection Close Command (\di)

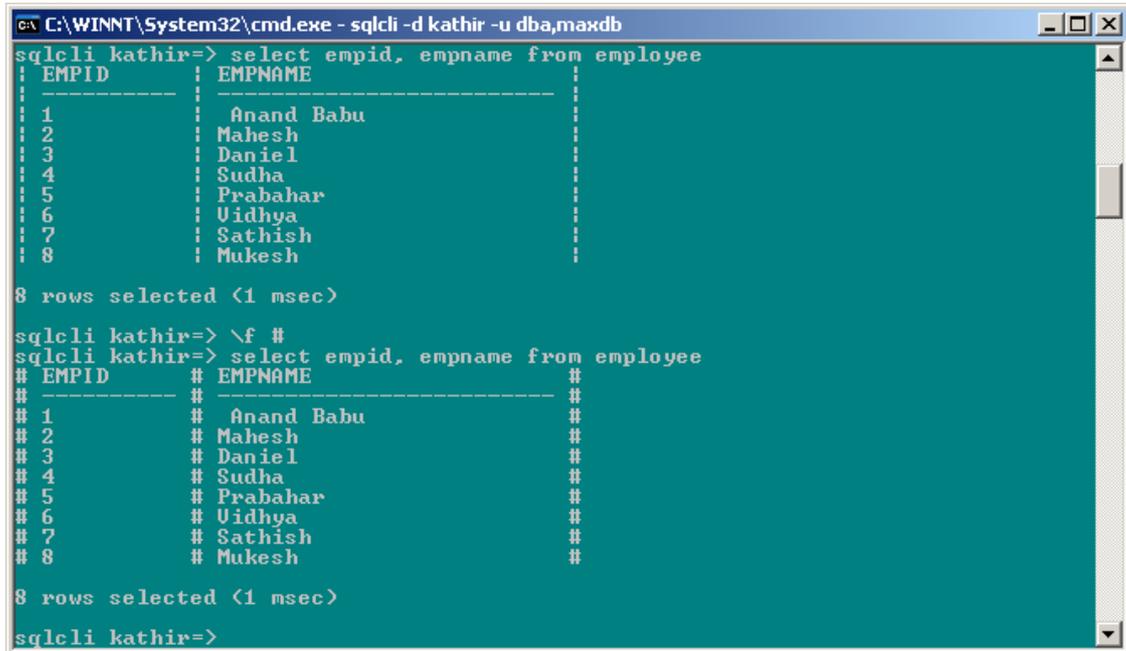
The command `\di` is used to terminate the established with a database instance.



```
C:\WINNT\System32\cmd.exe - sqlcli -d kathir -u dba,maxdb
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
C:\Documents and Settings\kathir>sqlcli -d kathir -u dba,maxdb
Welcome to the MaxDB interactive terminal.
Type: \h for help with commands
      \q to quit
sqlcli=> \c
Connected to kathir
sqlcli kathir=> \di
Connection closed
sqlcli=> _
```

Changing Field separator Command (\f)

Normally the field separator used by default is “ | “, in if this is to be changed this command can be used. The syntax is **\f <separator>**.



```
C:\WINNT\System32\cmd.exe - sqlcli -d kathir -u dba,maxdb
sqlcli kathir=> select empid, empname from employee
EMPID      EMPNAME
-----
1          Anand Babu
2          Mahesh
3          Daniel
4          Sudha
5          Prabahar
6          Uidhya
7          Sathish
8          Mukesh

8 rows selected (1 msec)

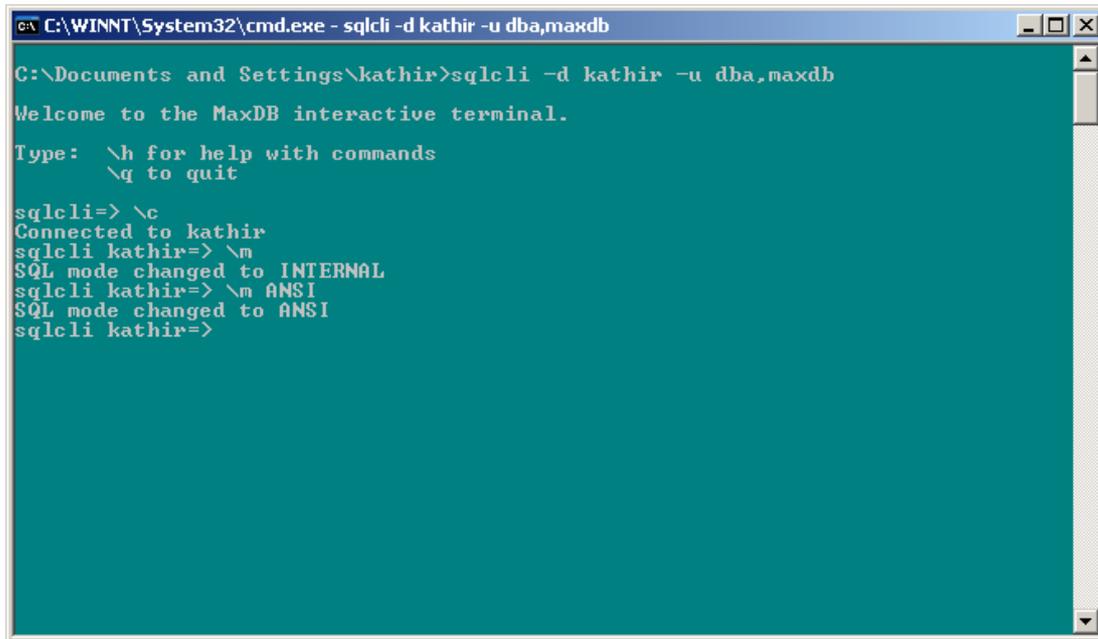
sqlcli kathir=> \f #
sqlcli kathir=> select empid, empname from employee
# EMPID      # EMPNAME      #
# -----      #
# 1          # Anand Babu   #
# 2          # Mahesh      #
# 3          # Daniel      #
# 4          # Sudha       #
# 5          # Prabahar    #
# 6          # Uidhya      #
# 7          # Sathish     #
# 8          # Mukesh      #

8 rows selected (1 msec)

sqlcli kathir=>
```

Changing SQL mode command (\m)

The SQL mode can be modified using the **\m** command. The syntax is **\m <mode>** in case **\m** alone is used the mode is put to **INTERNAL**.



```
C:\WINNT\System32\cmd.exe - sqlcli -d kathir -u dba,maxdb
C:\Documents and Settings\kathir>sqlcli -d kathir -u dba,maxdb
Welcome to the MaxDB interactive terminal.
Type:  \h for help with commands
       \q to quit

sqlcli=> \c
Connected to kathir
sqlcli kathir=> \m
SQL mode changed to INTERNAL
sqlcli kathir=> \m ANSI
SQL mode changed to ANSI
sqlcli kathir=>
```

Displaying the general database information (\s)

The general information about the database can be displayed using the **status (\s)** command.

```
C:\WINNT\System32\cmd.exe - sqlcli -d kathir -u dba,maxdb

C:\Documents and Settings\kathir>sqlcli -d kathir -u dba,maxdb

Welcome to the MaxDB interactive terminal.

Type:  \h for help with commands
       \q to quit

sqlcli=> \c
Connected to kathir
sqlcli kathir=> \s
host      : localhost
database  : kathir
xuserkey  :
user      : DBA
kernel version: KERNEL      7.5.0      BUILD 019-121-082-363
sapdbc version: libSQLDBC 7.5.0      BUILD 019-121-082-363
unicode   : NO
default code : ASCII
sql mode   : INTERNAL
autocommit : ON

sqlcli kathir=>
```

Exiting from SQLCLI

The SQLCLI console can be used using the command `\q` or `quit`.

```
C:\WINNT\System32\cmd.exe

Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\kathir>sqlcli -d kathir -u dba,maxdb

Welcome to the MaxDB interactive terminal.

Type:  \h for help with commands
       \q to quit

sqlcli=> \c
Connected to kathir
sqlcli kathir=> \q

C:\Documents and Settings\kathir>sqlcli -d kathir -u dba,maxdb

Welcome to the MaxDB interactive terminal.

Type:  \h for help with commands
       \q to quit

sqlcli=> quit

C:\Documents and Settings\kathir>
```

Thanks for reading and hope this material was useful to you.

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Author Bio



Kathirvel Balakrishnan is a Project Engineer for Wipro Technologies. His areas of interest are ABAP and Java Programming.

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