

# SQL\*Plus®

Quick Reference

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## About this Quick Reference

This Quick Reference shows *iSQL\*Plus* buttons and icons, and *iSQL\*Plus* and *SQL\*Plus* command syntax. For detailed information on each command, refer to the *SQL\*Plus User's Guide and Reference*.

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# Conventions for Command Syntax

The following two tables describe the notation and conventions for command syntax used in this Quick Reference.

**Table 1 Commands, Terms, and Clauses**

Feature	Example	Explanation
uppercase	BTITLE	Enter text exactly as spelled; it need not be in uppercase.
lowercase italics	<i>column</i>	A clause value; substitute an appropriate value.
words with specific meanings	<i>c</i>	A single character.
	<i>char</i>	A CHAR value—a literal in single quotes—or an expression with a CHAR value.
	<i>d or e</i>	A date or an expression with a DATE value.
	<i>expr</i>	An unspecified expression.
	<i>m or n</i>	A number of an expression with a NUMBER value.
	<i>text</i>	A CHAR constant with or without single quotes.
	<i>variable</i>	A substitution variable (unless the text specifies another variable type).

**Table 2 Punctuation**

Feature	Example	Explanation
vertical bar		Separates alternative syntax elements that may be optional or mandatory.
brackets	[ON   OFF]	One or more optional items. If two items appear separated by  , enter one of the items. Do not enter the brackets or  .
braces	{ON   OFF}	A choice of mandatory items; enter one of the items. Do not enter the braces or  .
underlining	{ON   <u>OFF</u> }	A default value; if you enter nothing, SQL*Plus assumes the underlined value.
ellipsis	<i>n ...</i>	Preceding items may be repeated any number of times.

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# Alphabetic List of SQL\*Plus Commands

@{url | file\_name[.ext]} [arg ...]

@@ { url | file\_name[.ext] } [arg ...]

/ (slash)

ACC[EPT] *variable* [NUM[BER] | CHAR | DATE | BINARY\_FLOAT | BINARY\_DOUBLE]  
[FOR[MAT] *format*] [DEF[AULT] *default*] [PROMPT *text* | NOPR[OMPT]] [HIDE]

\*A[PPEND] *text*

ARCHIVE LOG {LIST | STOP} | {START | NEXT | ALL | *integer*} [TO *destination*]

ATTRIBUTE [*type\_name.attribute\_name* [option...]]

BRE[AK] [ON *report\_element* [action [action]]] ...

BTI[TLE] [*printspectext* | *variable*] ... | [ON | OFF]

\*C[HANGE] *sepchar old* [*sepchar* [*new* [*sepchar*]]]

CL[EAR] *option* ...

COL[UMN] [{*column* | *expr*} [option ...]]

COMP[UTE] [*function* [LAB[EL] *text*] ... OF {*expr* | *column* | *alias*} ...ON {*expr* | *column* | *alias*  
| REPORT | ROW} ...]

CONN[ECT] [{/*logon* | /} [AS {SYSOPER | SYSDBA}]]

COPY {FROM *database* | TO *database* | FROM *database* TO *database*} {APPEND |  
CREATE | INSERT | REPLACE} *destination\_table*[(*column*, *column*, *column*, ...)] USING  
*query*

DEF[INE] [*variable*] | [*variable* = *text*]

\*DEL [*n* | *n m* | *n* \* | *n* LAST | \* | \* *n* | \* LAST | LAST]

DESC[RIBE] [{*schema.*]*object*[@*connect\_identifier*]}]

DISC[ONNECT]

\*ED[IT] [*file\_name*[.ext]]

EXEC[UTE] *statement*

{EXIT | QUIT} [SUCCESS | FAILURE | WARNING | *n* | *variable*  
| :*BindVariable*] [COMMIT | ROLLBACK]

\*GET [FILE] *file\_name*[.ext] [LIST] | NOL[IST]]

HELP | ? [*topic*]

\*HO[ST] [*command*]

\*I[NPUT] [*text*]

L[IST] [*n* | *n m* | *n* \* | *n* LAST | \* | \* *n* | \* LAST | LAST]  
 \*PASSW[ORD] [*username*]  
 PAU[SE] [*text*]  
 PRI[NT] [*variable ...*]  
 PRO[MPT] [*text*]  
 {EXIT | QUIT} [SUCCESS | FAILURE | WARNING | *n* | *variable*  
 | :*BindVariable*] [COMMIT | ROLLBACK]  
 RECOVER {*general* | *managed* | BEGIN BACKUP | END BACKUP}  
 REM[ARK]  
 REPF[OOTER] [PAGE] [*printspectext* | *variable*] ... | [ON | OFF]  
 REPH[EADER] [PAGE] [*printspectext* | *variable*] ... | [ON | OFF]  
 R[UN]  
 \*SAV[E] [FILE] *file\_name* [*.ext*] [CRE[ATE] | REP[LACE] | APP[END]]  
 SET *system\_variable value*  
 SHO[W] [*option*]  
 SHUTDOWN [ABORT | IMMEDIATE | NORMAL | TRANSACTIONAL [LOCAL]]  
 \*SPO[OL] [*filename* [*.ext*] [CRE[ATE] | REP[LACE] | APP[END]] | OFF | OUT]  
 STA[RT] { *url* | *file\_name* [*.ext*] } [*arg ...*]  
 STARTUP *options* | *upgrade\_options*  
 \*STORE {SET} *file\_name* [*.ext*] [CRE[ATE] | REP[LACE] | APP[END]]  
 TIMI[NG] [START *text* | SHOW | STOP]  
 TTI[TLE] [*printspectext* | *variable*] ... | [ON | OFF]  
 UNDEF[INE] *variable ...*  
 VAR[IABLE] [*variable* {NUMBER | CHAR | CHAR (*n* [CHAR | BYTE]) | NCHAR | NCHAR (*n*)  
 | VARCHAR2 (*n* [CHAR | BYTE]) | NVARCHAR2(*n*) | CLOB | NCLOB | REFCURSOR  
 | BINARY\_FLOAT | BINARY\_DOUBLE}]  
 WHENEVER OSERROR {EXIT [SUCCESS | FAILURE | *n* | *variable* | :*BindVariable*]  
 [COMMIT | ROLLBACK] | CONTINUE[COMMIT | ROLLBACK | NONE]}  
 WHENEVER SQLERROR {EXIT [SUCCESS | FAILURE | WARNING | *n* | *variable*  
 | :*BindVariable*] [COMMIT | ROLLBACK] | CONTINUE [COMMIT | ROLLBACK | NONE]}  
 \*Commands not available in *iSQL*\*Plus.

## Starting iSQL\*Plus

Use the following syntax in your web browser's URL field to display iSQL\*Plus.

`http://machine_name.domain:port/isqlplus[/dynamic?UserOpts]`

or to start iSQL\*Plus with DBA privileges, use:

`http://machine_name.domain/isqlplus/dba[/dynamic?DBAOpts]`

where *UserOpts* has the following syntax:

`UserLogin | Script | UserLogin&Script`

where *DBAOpts* has the following syntax:

`DBALogin | Script | DBALogin&Script`

where *UserLogin* has the following syntax:

`userid=username[/password] [ @ connect_identifie`

where *DBALogin* has the following syntax:

`userid={username[/password] [ @ connect_identifie] | / } AS {SYSDBA | SYSOPER}`

and where *Script* has the following syntax:

`script=text[&type={url | text}] [&action={execute | load}] [&variable=value. . .]`

## Examples

To start iSQL\*Plus, enter

`http://machine_name.domain:port/isqlplus`

To start iSQL\*Plus with DBA Privileges, enter

`http://machine_name.domain:port/isqlplus/dba`

## iSQL\*Plus Navigation

The table lists navigation icons used to navigate in iSQL\*Plus.

Icon	Label	Purpose
	Logout	Log out of the iSQL*Plus session, return to the Login screen.
	Preferences	Open the iSQL*Plus Preferences screen to set interface options, configure system options or change your password.
	Help	Open the iSQL*Plus Help in a new browser window.

## iSQL\*Plus Preferences

The table lists preferences that can be set in iSQL\*Plus.

Navigation Path	Purpose
Preferences > Interface Configuration	To change options which affect the iSQL*Plus user interface.
Preferences > System Configuration	To change options which affect output formatting, script execution and database administration.
Preferences > Change Password	To change your Oracle database password.

## iSQL\*Plus Workspace Buttons

The table lists buttons in the iSQL\*Plus Workspace, and their purpose.

Button	Purpose
Execute	To execute the contents of the Workspace.
Load Script	To load a script into the Workspace. The script can be local, or loaded via HTTP or FTP.
Save Script	To save the contents of the Workspace to a local file.
Cancel	To interrupt a script during execution.
Next Page	To view the next page of results.
Clear	To clear the script input and output areas.

## Starting and Leaving SQL\*Plus

Use the following commands to log in to and out of SQL\*Plus.

SQLPLUS [*option*] [*logon*] [*start*]

where *option* has the following syntax:

```
-H[ELP]
| -V[ERSION]
| [ [-C[OMPATIBILITY] x.y.z] [-L[OGON]]
  [-M[ARKUP] "mark_options" ] [-R[ESTRICT] {1 | 2 | 3}] [-S[ILENT]] ]
```

where *mark\_options* has the following syntax:

```
HTML [ON | OFF] [HEAD text] [BODY text] [TABLE text]
[ENTMAP {ON | OFF}] [SPOOL {ON | OFF}] [PRE[FORMAT] {ON | OFF}]
```

where *logon* has the following syntax:

```
{username/password} [ @connect_identifier ] | / } [AS {SYSOPER | SYSDBA}]
| /NOLOG
```

and where *start* has the following syntax:

```
@{url | file_name [.ext]} [arg ...]
```

```
{EXIT | QUIT} [SUCCESS | FAILURE | WARNING | n | variable
| :BindVariable] [COMMIT | ROLLBACK]
```

Commits or rolls back all pending changes, logs out of Oracle, terminates SQL\*Plus and returns control to the operating system.

In *i*SQL\*Plus, commits or rolls back all pending changes, stops processing the current *i*SQL\*Plus script and returns focus to the Workspace. In *i*SQL\*Plus, click the Logout button to log out of Oracle.

## Starting Up and Shutting Down a Database

Starting up and shutting down a database requires DBA privileges.

STARTUP *options* | *upgrade\_options*

where *options* has the following syntax:

[FORCE] [RESTRICT] [PFIL=filename] [QUIET] [ MOUNT [dbname] |  
[ OPEN [open\_options] [dbname] ] ] | NOMOUNT ]

where *open\_options* has the following syntax:

READ {ONLY | WRITE [RECOVER]} | RECOVER

and where *upgrade\_options* has the following syntax:

[PFIL=filename] {UPGRADE | DOWNGRADE} [QUIET]

Starts an Oracle instance with several options, including mounting and opening a database.

SHUTDOWN [ABORT | IMMEDIATE | NORMAL | TRANSACTIONAL [LOCAL]]

Shuts down a currently running Oracle instance, optionally closing and dismounting a database.

## Entering and Executing Commands

**Use the following commands to execute and collect timing statistics on SQL commands and PL/SQL blocks.**

/ (slash)

Executes the most recently executed SQL command or PL/SQL block which is stored in the SQL buffer. Does not list the command. Use slash (/) at the command prompt or line number prompt in SQL\*Plus command line, or use slash (/) in the *iSQL\*Plus* Workspace. The buffer has no command history and does not record SQL\*Plus commands.

EXEC[UTE] *statement*

Executes a single PL/SQL statement or runs a stored procedure.

R[UN]

Lists and executes the most recently executed SQL command or PL/SQL block which is stored in the SQL buffer. The buffer has no command history and does not record SQL\*Plus commands.

TIMI[NG] [START *text* | SHOW | STOP]

Records timing data for an elapsed period of time, lists the current timer's name and timing data, or lists the number of active timers.

**Use the following command to access the help system.**

HELP | ? [*topic*]

Accesses the command-line help system. Enter HELP INDEX or ? INDEX for a list of topics. In *iSQL\*Plus*, you can also click the Help button to display *iSQL\*Plus* online help. You can view *SQL\*Plus* resources at [http://otn.oracle.com/tech/sql\\_plus/](http://otn.oracle.com/tech/sql_plus/) and the Oracle Database Library at <http://otn.oracle.com/documentation/>.

**Use the following command to execute operating system commands.**

HO[ST] [*command*]

Executes an operating system command without leaving *SQL\*Plus*. Enter HOST without command to display an operating system prompt. You can then enter multiple operating system commands.

With some operating systems, you can use another character instead of HOST such as "!" (UNIX) and "\$" (Windows). See the Oracle installation and user's manuals provided for your operating system for details.

HOST is not available in *iSQL\*Plus*.

## Manipulating SQL, *SQL\*Plus* and PL/SQL Commands

**Use the following commands to edit SQL commands and PL/SQL blocks.**

A[PPEND] *text*

Adds specified text to the end of the current line in the SQL buffer. To separate *text* from the preceding characters with a space, enter two spaces. To append *text* that ends with a semicolon, end the command with two semicolons (a single semicolon is interpreted as a command terminator).

APPEND is not available in *iSQL\*Plus*.

C[HANGE] *sepchar old* [*sepchar* [*new* [*sepchar*]]]

Changes first occurrence of *old* on the current line of the SQL buffer. You can use any non-alphanumeric character such as "/" or "!" as a *sepchar*. You can omit the space between CHANGE and the first *sepchar*. The buffer has no command history list and does not record *SQL\*Plus* commands.

CHANGE is not available in *iSQL\*Plus*.

DEL [*n* | *n m* | *n* \* | *n* LAST | \* | \* *n* | \* LAST | LAST]

Deletes one or more lines of the SQL buffer ("\*" indicates the current line). You can omit the space between DEL and *n* or \*, but not between DEL and LAST. Enter DEL with no clauses to delete the current line of the buffer. The buffer has no command history list and does not record SQL\*Plus commands.

DEL is not available in *iSQL\*Plus*.

[INPUT] [*text*]

Adds one or more new lines of text after the current line in the SQL buffer. The buffer has no command history list and does not record SQL\*Plus commands.

INPUT is not available in *iSQL\*Plus*.

[LIST] [*n* | *n m* | *n* \* | *n* LAST | \* | \* *n* | \* LAST | LAST]

Lists one or more lines of the most recently executed SQL command or PL/SQL block which is stored in the SQL buffer. Asterisk (\*) indicates the current line. You can omit the space between LIST and *n* or \*, but not between LIST and LAST. Enter LIST with no clauses to list all lines. The buffer has no command history list and does not record SQL\*Plus commands.

### Use the following commands to run scripts.

@ { *url* | *file\_name*[*.ext*] } [*arg* ...]

Runs the SQL\*Plus statements in the specified script. The script can be called from the local file system or a web server. You can pass values to script variables in the usual way.

Only the *url* form is supported in *iSQL\*Plus*.

@@ { *url* | *file\_name*[*.ext*] } [*arg* ...]

Runs the SQL\*Plus statements in the specified script. This command is almost identical to the @ command. It is useful for running nested scripts because it has the additional functionality of looking for the specified script in the same path or *url* as the calling script.

Only the *url* form is supported in *iSQL\*Plus*.

STA[RT] { *url* | *file\_name* [.ext] } [*arg* ...]

Runs the SQL\*Plus statements in the specified script. The script can be called from the local file system or a web server. You can pass values to script variables in the usual way.

Only the *url* form is supported in *iSQL\*Plus*.

**Use the following commands to create and modify scripts.**

ED[IT] [*file\_name* [.ext]]

Invokes an operating system text editor on the contents of the specified file or on the contents of the SQL buffer. To edit the buffer contents, omit the file name. The buffer has no command history list and does not record SQL\*Plus commands.

EDIT is not available in *iSQL\*Plus*.

GET *file\_name* [.ext] [LIS[T] | NOL[IST]]

Loads a SQL statement or PL/SQL block from a file into the SQL buffer. In *iSQL\*Plus* click the Load Script button to load a script into the Workspace. The buffer has no command history list and does not record SQL\*Plus commands.

GET is not available in *iSQL\*Plus*.

REM[ARK]

Begins a comment in a script. The REMARK command must appear at the beginning of a line, and the comment ends at the end of the line (a line cannot contain both a comment and a command). SQL\*Plus does not interpret the comment as a command.

SAV[E] *file\_name* [.ext] [CRE[ATE] | REP[LACE] | APP[END]]

Saves the contents of the SQL buffer in a file. In *iSQL\*Plus*, click the Save Script button to save the Workspace contents to a script. The buffer has no command history list and does not record SQL\*Plus commands.

SAVE is not available in *iSQL\*Plus*.

STORE {SET} *file\_name* [.ext] [CRE[ATE] | REP[LACE] | APP[END]]

Saves attributes of the current SQL\*Plus environment in a file.

STORE is not available in *iSQL\*Plus*.

WHENEVER OSERROR {EXIT [SUCCESS | FAILURE | *n* | *variable*  
| *:BindVariable*] [COMMIT | ROLLBACK] | CONTINUE [COMMIT | ROLLBACK | NONE]}

Performs the specified action (exits SQL\*Plus by default) if an operating system error occurs (such as a file writing error).

In *iSQL\*Plus*, performs the specified action (stops the current script by default) and returns focus to the Workspace if an operating system error occurs.

WHENEVER SQLERROR {EXIT [SUCCESS | FAILURE | WARNING | *n* | *variable*  
| *:BindVariable*] [COMMIT | ROLLBACK] | CONTINUE [COMMIT | ROLLBACK | NONE]}

Performs the specified action (exits SQL\*Plus by default) if a SQL command or PL/SQL block generates an error.

In *iSQL\*Plus*, performs the specified action (stops the current script by default) and returns focus to the Workspace if a SQL command or PL/SQL block generates an error.

### Use the following commands to write interactive commands.

ACC[EPT] *variable* [NUM[BER] | CHAR | DATE | BINARY\_FLOAT | BINARY\_DOUBLE]  
[FOR[MAT] *format*] [DEF[AULT] *default*] [PROMPT *text* | NOPR[OMPT]] [HIDE]

Reads a line of input and stores it in a given substitution variable. In *iSQL\*Plus*, displays the Input Required screen for you to enter a value for the substitution variable.

DEF[INE] [*variable*] | [*variable* = *text*]

Specifies a substitution variable and assigns a CHAR value to it, or lists the value and variable type of a single variable or all variables.

PAU[SE] [*text*]

Displays the specified text then waits for the user to press RETURN. In *iSQL\*Plus*, displays the Next Page button which the user must click to continue.

PRO[MPT] [*text*]

Sends the specified message or a blank line to the user's screen.

UNDEF[INE] *variable* ...

Deletes one or more substitution variables that you defined either explicitly (with the DEFINE command) or implicitly (with a START command argument).

**Use the following commands to create and display bind variables.**

PRI[NT] [*variable ...*]

Displays the current values of bind variables, or lists all bind variables.

VAR[IABLE] [*variable* {NUMBER | CHAR | CHAR (*n* [CHAR | BYTE]) | NCHAR | NCHAR (*n*) | VARCHAR2 (*n* [CHAR | BYTE]) | NVARCHAR2(*n*) | CLOB | NCLOB | REFCURSOR | BINARY\_FLOAT | BINARY\_DOUBLE}]

Declares a bind variable that can be referenced in PL/SQL, or lists the current display characteristics for a single variable or all variables.

**Use the following symbols to create substitution variables and parameters for use in scripts.**

&*n*

Specifies a parameter in a script you run using the START command. START substitutes values you list after the script name as follows: the first for &1, the second for &2, and so on.

&*user\_variable*, &&*user\_variable*

Indicates a substitution variable in a SQL or SQL\*Plus command. SQL\*Plus substitutes the value of the specified substitution variable for each substitution variable it encounters. If the substitution variable is undefined, SQL\*Plus prompts you for a value *each* time an "&" variable is found, and the *first* time an "&&" variable is found.

. (period)

Terminates a substitution variable followed by a character that would otherwise be part of the variable name.

## Formatting Query Results

**Use the following commands to format, store and print your query results.**

ATTRIBUTE [*type\_name.attribute\_name* [*option...*]]

Specifies display characteristics for a given attribute of an Object Type column, such as the format of NUMBER data. Columns and attributes should not have the same names as they share a common namespace. Lists the current display characteristics for a single attribute or for all attributes.

Where *option* represents one of the following clauses:

ALI[AS] *alias*  
CLE[AR]  
FOR[MAT] *format*  
LIKE {*type\_name.attribute\_name* | *alias*}  
ON | OFF

BRE[AK] [ON *report\_element* [*action* [*action*]]] ...

Specifies where changes occur in a report and the formatting action to perform, such as:

- suppressing the display of duplicate values for a given column
- skipping a line each time a given column value changes (in *iSQL\*Plus*, only when Preformatted Output is ON)
- printing computed figures each time a given column value changes or at the end of the report

Enter BREAK with no clauses to list the current BREAK definition.

Where *report\_element* has the following syntax:

{*column* | *expr* | ROW | REPORT}

and where *action* has the following syntax:

[SKI[P] *n* | [SKI[P]] PAGE] [NODUP[LICATES] | DUP[LICATES]]

The SKIP option is not available in *iSQL\*Plus*.

BTI[TLE] [*printspec* [*text* | *variable*] ...] | [ON | OFF]

Places and formats a title at the bottom of each report page, or lists the current BTITLE definition. Use one of the following clauses in place of *printspec*:

BOLD  
CE[NTER]  
COL *n*  
FORMAT *text*  
LE[FT]  
R[IGHT]  
S[KIP] [*n*]  
TAB *n*

CL[EAR] *option* ...

Resets or erases the current value or setting for the specified option.

Where *option* represents one of the following clauses:

BRE[AKS]  
BUFF[ER]  
COL[UMNS]  
COMP[UTES]  
SCR[EEN]  
SQL  
TIMI[NG]

CLEAR SCREEN is not available in *iSQL\*Plus*.

COL[UMN] [{*column* | *expr*} [*option* ...]]

Specifies display attributes for a given column, such as:

- text for the column heading
- alignment for the column heading
- format for NUMBER data
- wrapping of column data

Also lists the current display attributes for a single column or all columns.

Where *option* represents one of the following clauses:

ALI[AS] *alias*  
CLE[AR]  
ENTMAP {ON | OFF}  
FOLD\_A[FTER]  
FOLD\_B[EFORE]  
FOR[MAT] *format*  
HEA[DING] *text*  
JUS[TIFY] {L[EFT] | C[ENTER] | R[IGHT]}  
LIKE {*expr* | *alias*}  
NEWL[INE]  
NEW\_V[ALUE] *variable*  
NOPRI[NT] | PRI[NT]  
NUL[L] *text*  
OLD\_V[ALUE] *variable*  
ON | OFF  
WRA[PPED] | WOR[D\_WRAPPED] | TRU[NCATED]

Enter COLUMN [{*column* | *expr*} FORMAT *format*] where the *format* element specifies the display format for the column.

To change the display format of a NUMBER column, use FORMAT followed by one of the elements in the following table:

<b>Element</b>	<b>Examples</b>	<b>Description</b>
, (comma)	9,999	Displays a comma in the specified position.
. (period)	99.99	Displays a period (decimal point) to separate the integral and fractional parts of a number.
\$	\$9999	Displays a leading dollar sign.
0	0999 9990	Displays leading zeros Displays trailing zeros.
9	9999	Displays a value with the number of digits specified by the number of 9s. Value has a leading space if positive, a leading minus sign if negative. Blanks are displayed for leading zeroes. A zero (0) is displayed for a value of zero.
B	B9999	Displays blanks for the integer part of a fixed-point number when the integer part is zero, regardless of zeros in the format model.
C	C999	Displays the ISO currency symbol in the specified position.
D	99D99	Displays the decimal character to separate the integral and fractional parts of a number.
EEEE	9.999EEEE	Displays value in scientific notation (format must contain exactly four "E"s).
G	9G999	Displays the group separator in the specified positions in the integral part of a number.
L	L999	Displays the local currency symbol in the specified position.
MI	9999MI	Displays a trailing minus sign after a negative value. Display a trailing space after a positive value.
PR	9999PR	Displays a negative value in <angle brackets>. Displays a positive value with a leading and trailing space.
RN rn	RN rn	Displays uppercase Roman numerals. Displays lowercase Roman numerals. Value can be an integer between 1 and 3999.
S	S9999 9999S	Displays a leading minus or plus sign. Displays a trailing minus or plus sign.

Element	Examples	Description
TM	TM	Displays the smallest number of decimal characters possible. The default is TM9. Fixed notation is used for output up to 64 characters, scientific notation for more than 64 characters. Cannot precede TM with any other element. TM can only be followed by a single 9 or E
U	U9999	Displays the dual currency symbol in the specified position.

COMP[UTE] [*function* [LAB[EL] *text*] ... OF {*expr* | *column* | *alias*} ... ON {*expr* | *column* | *alias* | REPORT | ROW} ...]

In combination with the BREAK command, calculates and prints summary lines using various standard computations. It also lists all COMPUTE definitions. The following table lists valid functions. All functions except NUMBER apply to non-null values only. COMPUTE functions are always executed in the following sequence AVG, COUNT, MINIMUM, MAXIMUM, NUMBER, SUM, STD, VARIANCE.

Function	Computes	Applies to Datatypes
AVG	Average of non-null values	NUMBER
COU[NT]	Count of non-null values	All types
MIN[IMUM]	Minimum value	NUMBER, CHAR, NCHAR, VARCHAR2 (VARCHAR), NVARCHAR2 (NCHAR VARYING)
MAX[IMUM]	Maximum value	NUMBER, CHAR, NCHAR, VARCHAR2 (VARCHAR), NVARCHAR2 (NCHAR VARYING)
NUM[BER]	Count of rows	All types
SUM	Sum of non-null values	NUMBER
STD	Standard deviation of non-null values	NUMBER
VAR[ANCE]	Variance of non-null values	NUMBER

REPF[OOTER] [PAGE] [*printspec* [*text* | *variable*] ...] | [ON | OFF]

Places and formats a footer at the bottom of a report, or lists the current REPFOOTER definition.

Where *printspec* represents one or more of the following clauses:

BOLD  
CE[ENTER]  
COL *n*  
FORMAT *text*  
LE[FT]  
R[IGHT]  
S[KIP] [*n*]  
TAB *n*

REPH[EADER] [PAGE] [*printspec* [*text* | *variable*] ...] | [ON | OFF]

Places and formats a header at the top of a report, or lists the current REPHEADER definition.

Where *printspec* represents one or more of the clauses shown for REPFOOTER.

SPO[OL] [*filename*[.ext] [CRE[ATE] | REPL[ACE] | APP[END]] | OFF | OUT]

Stores query results in a file, or optionally sends the file to a printer. OFF stops spooling. OUT stops spooling and sends the file to your computer's default printer. Enter SPOOL with no clauses to list the current spooling status. If no file extension is given, the default extension, *.lst* or *.lis*, is used. In *iSQL\*Plus*, use the Preferences screen to direct output to a file.

SPOOL is not available in *iSQL\*Plus*.

TTI[TLE] [*printspec* [*text* | *variable*] ...] | [ON | OFF]

Places and formats a specified title at the top of each report page, or lists the current TTITLE definition. The old form of TTITLE is used if only a single word or a string in quotes follows the TTITLE command.

Where *printspec* represents one or more of the following clauses:

BOLD  
CE[ENTER]  
COL *n*  
FORMAT *text*  
LE[FT]  
R[IGHT]  
S[KIP] [*n*]  
TAB *n*

## Accessing Databases

Use the following commands to access and copy data between tables on different databases.

CONN[ECT] [{/logon | /} [AS {SYSOPER | SYSDBA}]]

where *logon* requires the following syntax:

*username[/password] [@connect\_identifier]*

Connects a given username to the Oracle Database. If you omit *connect\_identifier*, SQL\*Plus connects you to the default database. If you omit *username* and/or *password*, SQL\*Plus prompts you for them. CONNECT followed by a slash (/) connects you using a default (OPS\$) logon.

When you run a CONNECT command, the site profile, glogin.sql, and the user profile, login.sql, are processed in that order. CONNECT does not reprompt for username or password if the initial connection does not succeed.

DISC[ONNECT]

Commits pending changes to the database and logs the current user out of Oracle, but does not exit SQL\*Plus. In SQL\*Plus command line, use EXIT or QUIT to log out of Oracle and return control to your computer's operating system. In *iSQL\*Plus*, click the Logout button to log out of Oracle.

COPY {FROM *database* | TO *database* | FROM *database* TO *database*} {APPEND | CREATE | INSERT | REPLACE} *destination\_table*[(*column*, *column*, *column*, ...)] USING *query*

where *database* has the following syntax:

*username[/password]@connect\_identifier*

Copies data from a query to a table in the same or another database. APPEND, CREATE, INSERT or REPLACE specifies how COPY treats the existing copy of the destination table (if it exists). USING *query* identifies the source table and determines which rows and columns COPY copies from it. COPY supports CHAR, DATE, LONG, NUMBER and VARCHAR2 datatypes.

PASSW[ORD] [*username*]

Allows you to change a password without displaying it on an input device. In *iSQL\*Plus*, you can also use the Password screen to change your password.

## Miscellaneous

ARCHIVE LOG {LIST | STOP} | {START | NEXT | ALL | *integer*}[TO *destination*]

Starts or stops automatic archiving of online redo logs, manually (explicitly) archives specified redo logs, or displays information about redo log files.

DESC[RIBE] [{*schema*.]*object*[@*connect\_identifier*]}

Lists the column definitions for a table, view or synonym, or the specifications for a function or procedure.

RECOVER {*general* | *managed* | BEGIN BACKUP | END BACKUP}

where the *general* clause has the following syntax:

```
[AUTOMATIC] [FROM location]  
{ full_database_recovery | partial_database_recovery | LOGFILE filename }  
[ {TEST | ALLOW integer CORRUPTION | parallel_clause } [TEST | ALLOW integer  
CORRUPTION | parallel_clause ]...]  
[CONTINUE [DEFAULT] | CANCEL]
```

where the *full\_database\_recovery* clause has the following syntax:

```
[STANDBY] DATABASE  
[ {UNTIL {CANCEL | TIME date | CHANGE integer} | USING BACKUP CONTROLFILE }  
[UNTIL {CANCEL | TIME date | CHANGE integer} | USING BACKUP CONTROLFILE]...]
```

where the *partial\_database\_recovery* clause has the following syntax:

```
{TABLESPACE tablespace [, tablespace]...  
| DATAFILE {filename | filename} [, filename | filename]...  
| STANDBY {TABLESPACE tablespace [, tablespace]...  
| DATAFILE {filename | filename} [, filename | filename]...}  
UNTIL [CONSISTENT WITH] CONTROLFILE }
```

where the *parallel* clause has the following syntax:

```
{ NOPARALLEL | PARALLEL [ integer ] }
```

where the *managed* clause has the following syntax:

MANAGED STANDBY DATABASE *recover\_clause* | *cancel\_clause* | *finish\_clause*

where the *recover\_clause* has the following syntax:

```
{ { DISCONNECT [ FROM SESSION ] | { TIMEOUT integer | NOTIMEOUT } }  
| { NODELAY | DEFAULT DELAY | DELAY integer } | NEXT integer  
| { EXPIRE integer | NO EXPIRE } | parallel_clause  
| USING CURRENT LOGFILE | UNTIL CHANGE integer  
| THROUGH { [ THREAD integer ] SEQUENCE integer
```

```

        | ALL ARCHIVELOG | { ALL | LAST | NEXT } SWITCHOVER} }
[ DISCONNECT [ FROM SESSION ] | { TIMEOUT integer | NOTIMEOUT }
| { NODELAY | DEFAULT DELAY | DELAY integer } | NEXT integer
| { EXPIRE integer | NO EXPIRE } | parallel_clause
| USING CURRENT LOGFILE | UNTIL CHANGE integer
| THROUGH { [ THREAD integer ] SEQUENCE integer
| ALL ARCHIVELOG | { ALL | LAST | NEXT } SWITCHOVER } ]...

```

where the *cancel\_clause* has the following syntax:

```
CANCEL [IMMEDIATE] [WAIT | NOWAIT]
```

where the *finish\_clause* has the following syntax:

```
[ DISCONNECT [ FROM SESSION ] ] [ parallel_clause ]
FINISH [ SKIP [ STANDBY LOGFILE ] ] [ WAIT | NOWAIT ]
```

where the *parallel\_clause* has the following syntax:

```
{ NOPARALLEL | PARALLEL [ integer ] }
```

Performs media recovery on one or more tablespaces, one or more datafiles, or the entire database.

Because of possible network timeouts, it is recommended that you use SQL\*Plus command-line, not *iSQL\*Plus*, for long running DBA operations such as RECOVER.

SET *system\_variable value*

Sets a system variable to alter the SQL\*Plus environment settings for your current session. For example, to:

- set the display width for data
- customize HTML formatting
- enable or disable printing of column headings
- set the number of lines per page

In *iSQL\*Plus*, you can also use the Preferences screen to set system variables.

Enter a system variable followed by a value as shown below:

```

SET APPEND[INFO]{ON | OFF | text}
SET ARRAY[SIZE] {15 | n}
SET AUTO[COMMIT] {ON | OFF | IMM[EDIATE] | n}
SET AUTOP[RINT] {ON | OFF}
SET AUTORECOVERY {ON | OFF}
SET AUTOT[RACE] {ON | OFF | TRACE[ONLY]} [EXPL[AIN]] [STAT[ISTICS]]
SET BLOC[KTERMINATOR] {c | c | ON | OFF}

```

```

SET CMDS[EP] {; | c | ON | OFF}
SET COLSEP {_ | text}
SET COM[PATIBILITY] {V7 | V8 | NATIVE}
SET CON[CAT] {; | c | ON | OFF}
SET COPYC[OMMIT] {0 | n}
SET COPYTYPECHECK {ON | OFF}
SET DEF[INE] {& | c | ON | OFF}
SET DESCRIBE [DEPTH {1 | n | ALL}] [LINENUM {ON | OFF}] [INDENT {ON | OFF}]
SET ECHO {ON | OFF}
*SET EDITF[ILE] file_name[.ext]
SET EMB[EDDED] {ON | OFF}
SET ESC[APE] {\ | c | ON | OFF}
SET FEED[BACK] {6 | n | ON | OFF}
SET FLAGGER {OFF | ENTRY | INTERMED[IATE] | FULL}
*SET FLU[SH] {ON | OFF}
SET HEA[DING] {ON | OFF}
SET HEADS[EP] {1 | c | ON | OFF}
SET INSTANCE [instance_path | LOCAL]
SET LIN[ESIZE] {80 | n} (default is 150 in iSQL*Plus)
SET LOBOF[FSET] {n | 1}
SET LOGSOURCE [pathname]
SET LONG {80 | n}
SET LONGC[HUNKSIZE] {80 | n}
SET MARK[UP] HTML {ON | OFF} [HEAD text] [BODY text] [TABLE text]
[ENTMAP {ON | OFF}] [SPOOL {ON | OFF}] [PRE[FORMAT] {ON | OFF}]
SET NEWP[AGE] {1 | n | NONE}
SET NULL text
SET NUMF[ORMAT] format
SET NUM[WIDTH] {10 | n}
SET PAGES[IZE] {14 | n}
SET PAU[SE] {ON | OFF | text}
SET RECSEP {WR[APPED] | EA[CH] | OFF}
SET RECSEPCHAR {; | c}
SET SERVEROUT[PUT] {ON | OFF} [SIZE n] [FOR[MAT] {WRA[PPED]
| WOR[D_W]RAPPED} | TRU[NCATED]]}
*SET SHIFT[I]NOUT {VIS[IBLE] | INV[ISIBLE]}
*SET SHOW[MODE] {ON | OFF}
*SET SQLBL[ANKLINES] {ON | OFF}
SET SQLC[ASE] {MIX[ED] | LO[W]ER | UP[PER]}
*SET SQLCO[NTINUE] {> | text}
*SET SQLN[UMBER] {ON | OFF}
SET SQLPLUSCOMPAT[IBILITY] {x.y.z}
*SET SQLPRE[FIX] {# | c}
*SET SQLP[ROMPT] {SQL> | text}
SET SQLT[ERMINATOR] {; | c | ON | OFF}

```

\*SET SUF[FIX] {SQL | *text*}  
 \*SET TAB {ON | OFF}  
 \*SET TERM[OUT] {ON | OFF}  
 \*SET TI[ME] {ON | OFF}  
 SET TIMI[NG] {ON | OFF}  
 \*SET TRIM[OUT] {ON | OFF}  
 \*SET TRIMS[POOL] {ON | OFF}  
 SET UND[ERLINE] {\_ | c | ON | OFF}  
 SET VER[IFY] {ON | OFF}  
 SET WRA[P] {ON | OFF}

An asterisk (\*) indicates the SET option is not supported in *iSQL\*Plus*.

SHO[W] [*option*]

Shows the value of a SQL\*Plus system variable, or the current SQL\*Plus environment. Enter any system variable set by the SET command in place of *system\_variable*. SHOW SGA requires a DBA privileged login. Use one of the following terms or clauses in place of *option*:

*system\_variable*

ALL

BTI[TLE]

ERR[ORS] [ {FUNCTION | PROCEDURE | PACKAGE | PACKAGE BODY | TRIGGER  
| VIEW | TYPE | TYPE BODY | DIMENSION | JAVA CLASS} [*schema.name*]

LNO

PARAMETERS [*parameter\_name*]

PNO

RECYC[LEBIN] [*original\_name*]

REL[EASE]

REPF[OOTER]

REPH[EADER]

SGA

SPOO[L] (Not available in *iSQL\*Plus*)

SQLCODE

TTI[TLE]

USER