

A powerful spreadsheet

Q-calc is a powerful spreadsheet with extensive math and logical facilities. Although being one of the largest spreadsheets on the market, Q-calc is easy to learn and help text functions are always available. Q-calc is a spreadsheet for the UNIX environment.

- o Very large matrix -- 999 rows by 18278 columns
- o Advanced window handling
- o Impressive recalculation speed
- o Allows pre-stored command sequences
- o Data can very easily be merged from multiple matrices
- o Run D-NIX commands during a spreadsheet session
- o Pipe data in/out from the spreadsheet
- o Wide range of functions supported
- o Easy to learn. Help functions always on-line
- o Help texts in English or Swedish
- o Built-in graphic facilities
- o Uses 'Termcap' for terminal handling

Advanced window handling

The screen can be divided into 16 horizontal or vertical windows. Windows can be linked for scroll or can scroll individually.

Recalculation speed

Recalculation when changing a value seldom takes more than a second because of Q-calc's internal pointer structure.

Pre-stored command sequences

Sequences of commands and data can be saved on disk and can be called up by just one single command.

Automatic or manual data consolidation

Data from multiple spreadsheets can be combined to a new spreadsheet. Consolidation may be automatic or manual.

Field references

Q-calc keeps a record of all references between fields. If one field is updated, then all fields related to this field will be updated according to the rules set by the user. The user does not have to define recalculation order or give explicit recalculation commands.

D-NIX interface

The D-NIX interface provides the user with the opportunity to integrate his own programs with Q-calc, which gives a maximum of flexibility in user defined applications.

Word processing interface

LEX-68 is an advanced word processing package which runs under D-NIX. Matrices or part of a matrix can easily be moved from Q-calc to LEX-68 for further processing.

Colour graphics interface

Q-calc includes powerful functions for presentation of spreadsheet data as bar and pie charts, stacked bars, line, x-y, commodity diagrams. Many types of colour terminals may be used.

Help functions

In Q-calc there is always an on-line help function which explains different operations. All texts can be translated to any language. English and Swedish help texts are available today.

Field search

With just one command the user can search for a field containing a certain text string, a reference to another field or a 'free' text in a field definition.

Field names

Fields or groups of fields can be given name as: income tax, value added tax, salary, etc. Names can also be used as references at consolidations.

Q-calc functions

Function	Returns	Computes
abs(N)	N	absolute value
acos(N)	N	arc cosine of argument (in radians)
asin(N)	N	arc sine of argument (in radians)
atan(N)	N	arc tangent of argument (in radians)
avg	N	average of values
ceil(N)	N	smallest integer $\geq N$
choose	E	choose from a list of values
cos(N)	N	cosine of argument expressed in radians
count	E	number of non-blank values
date(N,N)	S	returns date given days since Dec. 31, 1899
days(S)	N	returns days since Dec. 31, 1899 given date
e()	N	returns the constant 2.7182812845904524
exp(N)	N	exponential, i.e. e to the N
floor(N)	N	smallest integer $\leq N$
fv(N,N,N)	N	returns future value of payment, interest, period
integer(N)	N	integer obtained by truncation
irr(N,E)	N	returns internal rate of return of cash flow
log(N)	N	logarithm to the base e
log10(N)	N	logarithm to the base 10
lookup	E	table lookup function
max	N	maximum of values
min	N	minimum of values
npv	N	net present value function
num(S)	N	convert a string to a number
pi()	N	returns the constant 3.14159265358979324
pmt(N,N,N)	N	returns the payment for principal, interest, term
pos(S,N,N)	S	substring of string S
pow(N,N)	N	first arg to the power second arg
prod	N	product of values
pv(N,N,N)	N	returns present value given payment, interest, period
repl(S,N)	S	string S replicated N times
sign(N)	N	sign of the argument (+1, -1 or 0)
sin(N)	N	sine of argument expressed in radians
sqrt(N)	N	square root
stdev	N	standard deviation of values
str(N)	S	convert a number to a string
sum	N	sum of values
tan(N)	N	tangent of argument expressed in radians

Q-calc display format

just	justifies the fields left, right or centered
prot	prevents someone from altering the definition of the field
money	assigns one of seven possible currency strings to precede numbers
thous	separate groups of three consecutive digits by a comma, period or blank
neg	places parentheses around negative numbers
sci	displays numbers using scientific notation, mantiss plus exponent
decimals	controls the number of digits to the right of the decimal point
width	controls the width of a column and all fields within it

Q-calc commands

/Copy command

copy source region to target region

/File commands

Fetch	read a saved spreadsheet from your directory
Save	save the current spreadsheet in your directory
Write	create a file of your spreadsheet that may be printed

/Insert commands

Row	insert one or more rows at the field cursor
Column	insert one or more columns at the field cursor
Window	insert a window either vertically or horizontally

/Delete commands

Row	delete one or more rows starting at field cursor
Column	delete one or more columns starting at field cursor
Window	delete the window the cursor is in
All	erase entire worksheet and all format settings

/Move commands

move elements from source to target region

/Set commands

Format	set the format of a field, range, column or the entire spreadsheet
Data-entry	moves the cursor in any rectangular region prompting for your input
Keystroke	permits the saving of any sequence of keystrokes
	turn saving on and supply a file name in which to store the strokes
	play them back using the keystroke fetch command
Recalc	turns automatic recalculation on and off
Title	permits a title to be placed at the top of the spreadsheet

/Window commands

Left	the current columns disappear and those to the left appear
Right	the current columns disappear and those to the right appear
Up	the current rows disappear and those above appear
Down	the current rows disappear and those below appear
Align	places field that cursor is in, in the upper left hand part of window
Sync	synchronizes/desynchronizes window scroll

/External commands

Copy	extracts any value(s) from a saved spreadsheet and places it onto the current worksheet where you designate
Read	reads the values produced by some Unix or user written routine into a designated place on the worksheet
Filter	takes any region of the worksheet, passes the data to any Unix or user written routine and places any generated data back onto the worksheet where you designate
Push	places you into a new shell, use ^d to return to Q-calc

/Apply commands

Find	search for any pattern in a string or a field definition
Sort	in ascending or descending order using up to 4 keys
Table	create a region of numbers using any initial and increment values

/Name command

Create	create either a local or an external name
Delete	delete a name
List	see a list of current names

/Graph commands

Reset	sets all current options back to defaults
Type	bar, stacked bar, line, multi-line, XY, pie and commodity graphs
Values	specify y-axis values for a graph
Bottom	specifies x-axis labels for a graph
Point	specifies data labels for points on a line graph
Legend	specifies values to be used as a legend for the graph
Display	displays type of graph, with all designated options to be displayed
Save	you may save a graph and its name
Option	you may choose colour or shading, title for the graph and the axes, axis labels are displayed, automatic or manual scaling.
Name	permits you to assign a name to a graph for later recall

Top level commands

l, and left arrow	move the field cursor to the left
r, and right arrow	move the field cursor to the right
u, and up arrow	move the field cursor up
d, and down arrow	move the field cursor down
space	move to the next field
g	goto specific field
h	move to a1
q	quit (exit Q-calc)
~,?,...,(CTRL-W)	define current field (enter edit mode)
;	move to next window
!	recompute the worksheet
?	display help message
CTRL-L	redraw the screen
/	enter command mode

Operators in expressions

Operator	Meaning
e1 ? e2 : e3	if-then-else (e2 if e1 is non-zero, e3 if e1 is zero)
e1 ! e2	1 if either e1 or e2 is non-zero, else 0 (OR)
e1 & e2	1 if both e1 and e2 are non-zero, else 0 (AND)
e1 > e2	1 if e1 is greater than e2, else 0
e1 < e2	1 if e1 is less than e2, else 0
e1 = e2	1 if e1 is equal to e2, else 0
e1 != e2	1 if e1 is not equal to e2, else 0
e1 >= e2	1 if e1 is not less than e2, else 0
e1 <= e2	1 if e1 is not greater than e2, else 0
e1 + e2	addition
e1 - e2	subtraction
e1 * e2	multiplication
e1 / e2	division
e1 % e2	remainder of integer division
! e1	1 if e1 is zero, else 0 (NOT)
f1...f2	indicates field range f1 through f2
\$f1, \$f1, f1\$	fixes reference to field f to avoid relocation

Editing commands

any printing character	insert character in line at cursor
(enter)	enter line (exit edit mode successfully)
\	define a range around the field cursor
arrow keys	move field cursor
backspace	delete character before cursor
CTRL-G	abort input (exit edit mode causing no action)
CTRL-W	re-edit original text (valid only for field definitions)
CTRL-K	clear input line
CTRL-A	move to beginning of input line
CTRL-E	move to end of input line
CTRL-D	delete character under cursor
CTRL-B	move cursor backwards on line
CTRL-F	move cursor forwards on line
?, at beginning of line	display a help message
<, at the beginning of line	back out of previous command prompt