TYPES

Name	Description
void	void (no values)
any	any type
int	integer
bool	boolean
string	character string
indi	person
fam	family
list	list / array
node	gedcom line
table	hash table
set	person or family set
var	variable (not a type)

ARITHMETIC AND LOGICAL FUNCTIONS

Name	Parameters	Returns	Description
add	int [,int]+	int	addition
sub	int, int	int	subtraction
mul	int [,int]+	int	multiplication
div	int, int	int	division
mod	int, int	int	modulus
neg	int	int	negation
eq	any, any	bool	equal
ne	any, any	bool	not equal
lt	int, int	bool	less than
le	int, int	bool	less or equal
gt	int, int	bool	greater than
ge	int, int	bool	greater or equal
and	any [,any]+	bool	and
or	any [,any]+	bool	or
not	any	bool	not

INTERACTION FUNCTIONS

Name	Parameters	Returns	Description
getint	var [,string]	void	get integer from user
getstr	var [,string]	void	get string from user
getindi	var [,string]	void	get person from user
getfam	var [,string]	void	get family from user
getindiset	var [,string]	void	get person set from user
chooseindi	set	indi	have user select person
choosesubset	set	set	have user select person set
choosechild	indi|fam	indi	have user select child
choosespouse	indi	indi	have user select spouse
choosefam	indi	fam	have user select family
menuchoose	list [,string]	int	have user select from menu

PERSON FUNCTIONS			
Name	Parameters	Returns	Description
name	indi	string	standard name of
fullname	indi, bool, bool, int	string	general name of
trimname	indi, int	string	trimmed name of
surname	indi	string	surname of
givens	indi	string	given names of
title	indi	string	first title of
sex	indi	string	sex of
key	indi	string	key of
male	indi	bool	is male?
female	indi	bool	is female?
birth	indi	node	first birth event
death	indi	node	first death event
baptism	indi	node	first baptism event
burial	indi	node	first burial event
father	indi	indi	father
mother	indi	indi	mother
parents	indi	fam	parents family
nextsib	indi	indi	next younger sibling
prevsib	indi	indi	next older sibling
nfamilies	indi	int	number of families
nspouses	indi	int	number of spouses
inode	indi	node	root gedcom node
indi	string	indi	key to person
soundex	indi	string	soundex code
extractnames	node, list, var, var	void	extract name parts

FAMILY FUNCTIONS			
Name	Parameters	Returns	Description
husband	fam	indi	husband
wife	fam	indi	wife
marriage	fam	node	first marriage event
nchildren	fam	int	number of children
fnode	fam	node	root gedcom node
fam	string	fam	key to family

STRING FUNCTIONS			
Name	Parameters	Returns	Description
strlen	string	int	length
concat	string [,string]+	string	catenate two or more strings
lower	string	string	convert to lower case
upper	string	string	convert to upper case
capitalize	string	string	capitalize
trim	string, int	string	trim to length
save	string	string	make saved copy of
substring	string, int, int	string	extract substring
index	string, string, int	int	find substring index
d	int	string	convert int to digits
alpha	int	string	convert int to letter
ord	int	string	convert int to ordinal
card	int	string	convert int to cardinal
roman	int	string	convert int to Roman numeral
strtoint	string	int	convert digits to int
strcmp	string, string	int	compare two strings
strsoundex	string	string	soundex key
pn	indi, int	string	pronoun generator

GEDCOM NODE FUNCTIONS			
Name	Parameters	Returns	Description
tag	node	string	tag
value	node	string	value
xref	node	string	cross reference
child	node	node	first child node
parent	node	node	parent node
sibling	node	node	next sibling node

LIST FUNCTIONS			
Name	Parameters	Returns	Description
list	var	void	declare a list
push	list, any	void	push element onto list
enqueue	list, any	void	enqueue element on list
requeue	list, any	void	requeue element on list
pop	list	any	pop element from list
dequeue	list	any	dequeue element from list
empty	list	bool	list empty?
getel	list, int	any	get indexed element from list
setel	list, int, any	void	set indexed element in list
length	list	int	length of list

TABLE FUNCTIONS			
Name	Parameters	Returns	Description
table	var	void	declare a table
insert	table, string, any	void	insert element in table
lookup	table, string	any	lookup element in table

SET FUNCTIONS			
Name	Parameters	Returns	Description
indiset	var	void	decleare a set
addtoset	set, indi, any	void	add person to set
lengthset	set	int	length of set
deletefromset	set, indi, bool	void	remove person from set
union	set, set	set	union
intersect	set, set	set	intersection
difference	set, set	set	set difference
parentset	set	set	parent set
childset	set	set	children set
siblingset	set	set	sibling set
spouseset	set	set	spouses set
ancestorset	set	set	ancestors set
descendentset	set	set	descendents set
descendantset	set	set	ditto
namesort	set	void	sort set by name
keysort	set	void	sort set by key
valuesort	set	void	sort set by value
uniqueset	set	void	remove duplicate elements
gengedcom	set	void	generate gedcom

OUTPUT FUNCTIONS			
Name	Parameters	Returns	Description
linemode		void	output in line mode
pagemode	int, int	void	output in page mode
newfile	string, bool	void	change output file
outfile		string	current output file
pos	int, int	void	position to row/column
row	int	void	position to row
col	int	void	position to column
pageout		void	write page to output
copyfile	string	void	copy file to output
nl		string	newline
sp		string	space
qt		string	double quote

EVENT FUNCTIONS			
Name	Parameters	Returns	Description
date	node	string	first date value
place	node	string	first place value
year	node	string	first year value
long	node	string	long string form
short	node	string	short string from
extractdate	node, var, var, var	void	extract date
extractplaces	node, list, var	void	extract place
gettoday		node	create today as event
dayformat	int	void	set standard day format
dayformat	int	void	set standard month format
dateformat	int	void	set standard date format
stddate	node	string	date in standard form

MISCELLANEOUS FUNCTIONS			
Name	Parameters	Returns	Description
incr	var	void	increment variable
decr	var	void	decrement variable
print	[string]+,	void	print to standard output
database		string	current database name
set	var, any	void	assign value to variable

ITERATORS		
Name	Parameters	Description
children	fam, indi, int	iterate children in family
spouses	indi, indi, fam, int	interate spouses of person
families	indi, fam, indi, int	interate families of person
forindi	indi, num	iterate all persons in database
forfam	fam, num	iterate all families in database
forindiset	set, indi, any, int	iterate all persons in set
forlist	list, any, int	iterate all elements in list
fornodes	node, node	iterate all nodes in node list
traverse	node, node, int	traverse all nodes in tree