

Glossary of the Tasks in the IRAF System Packages  
IRAF Version 2.8

Task		Package	Description
access	-	language	- Test if a file exists
allocate	-	system	- Allocate a device, i.e., magtape drive mta, mtb, ...
average	-	lists	- Compute the mean and standard deviation of a list
back	-	language	- Return to the previous directory (after a chdir)
beep	-	language	- Send a beep to the terminal
bintxt	-	dataio	- Convert a binary file to an IRAF text file
blink	-	tv	- Blink two frames
blkavg	-	images	- Block average or sum a list of images
blkrep	-	images	- Block replicate a list of images
boxcar	-	images	- Boxcar smooth a list of 2-D images
break	*	language	- Break out of a loop
bye	-	language	- Exit a task or package
cache	-	language	- Cache parameter files, or print the current cache list
calcomp	-	plot	- Plot metacode on a Calcomp pen plotter
case	*	language	- One setting of a switch
cd	-	language	- Change directory
chdir	-	language	- Change directory
chpixtype	-	images	- Change the pixel type of a list of images
cl	-	language	- Execute commands from the standard input
clbye	-	language	- A cl followed by a bye (used to save file descriptors)
clear	-	language	- Clear the terminal screen
columns	-	lists	- Convert multicolumn file to separate files
commands	-	language	- A discussion of the syntax of IRAF commands
concatenate	-	system	- Concatenate a list of files
contour	-	plot	- Make a contour plot of an image
convolve	-	images	- Convolve a list of 2-D images with a rectangular filter
copy	-	system	- Copy a file or files (use IMCOPY for imagefiles)
count	-	system	- Count the number of lines, words, characters in a text file
crtpict	-	plot	- Generate greyscale plots of IRAF images
curfit	-	utilities	- Fit data with Chebyshev, Legendre or spline curve
cursors	-	language	- Graphics and image display cursors
cv	-	tv	- Control image device, display "snapshot"
cvl	-	tv	- Load image display (newer version of 'display')
deallocate	-	system	- Deallocate a previously allocated device
declarations	-	language	- Parameter/variable declarations
default	*	language	- The default clause of a switch
defpac	-	language	- Test if a package is defined
defpar	-	language	- Test if a parameter is defined
deftask	-	language	- Test if a task is defined
delete	-	system	- Delete a file or files (use IMDELETE to delete imagefiles)
detab	-	utilities	- Replace tabs with tabs and blanks
devices	-	system	- Print information on the locally available devices
devstatus	-	system	- Print the status of a device (mta, mtb, ...)

directory	-	system	-	List the files in a directory
diskspace	-	system	-	Show how much disk space is available
display	-	tv	-	Load an image or image section into the display
dparam	-	language	-	Dump a pset as a series of task.param=value assignments
edit	-	language	-	Edit a text file
ehistory	-	language	-	Edit history file to re-execute commands
else	*	language	-	Else clause of IF statement
entab	-	utilities	-	Replace blanks with tabs and blanks
envget	-	language	-	Get the string value of an environment variable
eparam	-	language	-	Edit parameters of a task
erase	-	tv	-	Erase an image frame
error	-	language	-	Print error code and message and abort
files	-	system	-	Expand a file template into a list of files
fit1d	-	images	-	Fit a function to image lines or columns
flprcache	-	language	-	Flush the process cache
fmedian	-	images	-	Quantize and median filter a 2-D image or a list of images
fmode	-	images	-	Quantize and modal filter a 2-D image or list of images
for	*	language	-	C-style for loop construct
fprint	*	language	-	Print a line into a parameter
frame	-	tv	-	Select the frame to be displayed
fscan	*	language	-	Scan a list
gauss	-	images	-	Convolve a list of 2-D images with an elliptical Gaussian
generic	-	softtools	-	Preprocess a generic source file
geomap	-	images	-	Calculate a coordinate transformation
geotran	-	images	-	Geometrically transform a set of 2-D images
gflush	-	language	-	Flush any buffered graphics output
gkidecode	-	plot	-	Decode metacode on the standard output
gkdir	-	plot	-	Directory listing of metacode file
gkiextract	-	plot	-	Extract individual frames from metacode file
gkimosaic	-	plot	-	Condense metacode frames to fit on one page
goto	*	language	-	Goto statement
gradient	-	images	-	Convolve a list of 2-D images with a gradient operator
graph	-	plot	-	Graph one or more image sections or lists
gripes	-	system	-	Send suggestions, complaints, etc. to the system
hafton	-	plot	-	Generate half-tone plots of an image
hdbexamine	-	softtools	-	Examine a help database
head	-	system	-	Print the first few lines of a text file
hedit	-	images	-	Header editor
help	-	system	-	Print online documentation
hidetask	-	language	-	Make a task invisible to the user
history	-	language	-	Display commands previously executed
hselect	-	images	-	Select a subset of images satisfying a boolean expression
if	*	language	-	If statement
imarith	-	images	-	Simple image arithmetic
imcombine	-	images	-	Combine images pixel-by-pixel using various algorithms
imcopy	-	images	-	Copy an image
imdebug	-	images	-	Image debugging package (currently undocumented)
imdelete	-	images	-	Delete a list of images
imdivide	-	images	-	Image division with zero checking and rescaling

imgets	-	images	-	Return the value of an image parameter as a string
imheader	-	images	-	Print an image header
imhistogram	-	images	-	Compute image histogram
imlintran	-	images	-	Linearly transform a list of 2-D images
implot	-	plot	-	Plot lines and columns of images using cursors
imrename	-	images	-	Rename one or more images
imshift	-	images	-	Shift a list of 2-D images
imslice	-	images	-	Slice images into images of lower dimension
imstack	-	images	-	Stack images into a single image of higher dimension
imstatistics	-	images	-	Compute and print statistics for a list of images
imsum	-	images	-	Compute the sum, average, or median of a set of images
imsurfit	-	images	-	Fit a surface to a 2-D image
imtranspose	-	images	-	Transpose a 2-D image
intro	-	language	-	A brief introduction to IRAF
jobs	-	language	-	Display status of background jobs
keep	-	language	-	Make recent set, task, etc. declarations permanent
kill	-	language	-	Kill a background job
laplace	-	images	-	Laplacian filter a list of 2-D images
lcase	-	utilities	-	Convert a file to lower case
lineclean	-	images	-	Replace deviant pixels in image lines
lintran	-	lists	-	Perform linear transformation of a list
listpixels	-	images	-	Convert an image section into a list of pixels
logging	-	language	-	Discussion of CL logging
logout	-	language	-	Log out of the CL
lparam	-	language	-	List the parameters of a task
lprint	-	system	-	Print a file on the line printer device
lroff	-	softtools	-	Lroff (line-roff) text formatter
lumatch	-	tv	-	Match the lookup tables of two frames
magnify	-	images	-	Magnify a list of 1-D or 2-D images
match	-	system	-	Print all lines in a file that match a pattern
mathfcns	-	language	-	Mathematical routines
median	-	images	-	Median filter a 2-D image or list of images
minmax	-	images	-	Compute the minimum and maximum pixel values in an image
mkdir	-	system	-	Create a new directory
mkhelpdb	-	softtools	-	Make (compile) a help database
mkmanpage	-	softtools	-	Make a manual page
mkpkg	-	softtools	-	Make or update an object library or package
mkscript	-	system	-	Make a command script
mktags	-	softtools	-	Tag all procedure declarations in a set of files
mktemp	-	language	-	Make a temporary (unique) file name
mkttydata	-	softtools	-	Build cache for termcap/graphcap device entries
mode	-	images	-	Modal filter a 2-D image or list of images
monochrome	-	tv	-	Select monochrome enhancement
movefiles	-	system	-	Move files to a directory
mtexamine	-	dataio	-	Examine the structure of a magnetic tape
netstatus	-	system	-	Print the status of the local network
news	-	system	-	Page through the system news file
next	*	language	-	Start next iteration of a loop
nsppkern	-	plot	-	Plot metacode on a NSPP (NCAR) plotter device

osfn	-	language	-	Return the host system equivalent of an IRAF filename
package	-	language	-	Define a new package, or print the current package names
page	-	system	-	Page through a file
parameters	-	language	-	Discussion of parameter attributes
pathnames	-	system	-	Expand a file template into a list of OS pathnames
pcol	-	plot	-	Plot a column of an image
pcols	-	plot	-	Plot the average of a range of image columns
polyfit	-	utilities	-	Fit polynomial to list of X,Y data
prcache	-	language	-	Show process cache, or lock a process into the cache
print	-	language	-	Format and print a line on the standard output
procedure	*	language	-	Start a procedure script
protect	-	system	-	Protect a file from deletion
prow	-	plot	-	Plot a line (row) of an image
prows	-	plot	-	Plot the average of a range of image lines
pseudocolor	-	tv	-	Select pseudocolor enhancement
putlog	-	language	-	Put a message to the logfile
pvector	-	plot	-	Plot an arbitrary vector in a 2D image
radix	-	language	-	Encode a number in the specified radix
rcardimage	-	dataio	-	Convert a cardimage file into a text file
reblock	-	dataio	-	Copy a binary file, optionally reblocking
redefine	-	language	-	Redefine a task
references	-	system	-	Find all help database references for a given topic
register	-	images	-	Register a set of images
rename	-	system	-	Rename a file
reset	-	language	-	Reset the value of an environment variable
return	*	language	-	Return from script with an optional value
rewind	-	system	-	Rewind a device (magtape)
rfits	-	dataio	-	Convert a FITS image into an IRAF image
rgb	-	tv	-	Select true color mode (red, green, and blue frames)
rgcursor	-	lists	-	Read the graphics cursor (makes a list)
rimcursor	-	lists	-	Read the image display cursor (makes a list)
rmbin	-	softools	-	Find/delete binary files in subdirectories
rmfiles	-	softools	-	Find/delete files in subdirectories
rotate	-	images	-	Rotate and shift a list of 2-D images
rtar	-	softools	-	Read a TAR format archive file
rtextimage	-	dataio	-	Convert text files to IRAF images
scan	*	language	-	Scan the standard input
sections	-	images	-	Expand an image template on the standard output
service	-	language	-	Service a query from a background job
set	-	language	-	Set an environment variable
sgidecode	-	plot	-	Decode an SGI format metacode file
sgikern	-	plot	-	Simple graphics interface (SGI) graphics kernel
shiftlines	-	images	-	Shift image lines
show	-	language	-	Show an environment variable
showcap	-	plot	-	Show and decode graphcap entries
sleep	-	language	-	Hibernate for a specified time
sort	-	system	-	Sort a text file
split	-	utilities	-	Split a large file into smaller segments
spy	-	system	-	Show processor status
stdgraph	-	plot	-	Plot metacode on the standard graphics device

stdplot	-	plot	-	Plot metacode on the standard plotter device
strings	-	language	-	String manipulation routines
stty	-	language	-	Set/show terminal characteristics
surface	-	plot	-	Make a surface plot of an image
switch	*	language	-	Multiway branch construct
t2d	-	dataio	-	Fast tape to disk copy
table	-	lists	-	Format a list of words into a table
tail	-	system	-	Print the last few lines of a file
task	-	language	-	Define a new task
tee	-	system	-	Tee the standard output into a file
time	-	language	-	Print the current time
tokens	-	lists	-	Break a file up into a stream of tokens
translit	-	utilities	-	Replace or delete specified characters in a file
tv	-	images	-	Image display load and control package
txtbin	-	dataio	-	Convert an IRAF text file to a binary file
type	-	system	-	Type a text file on the standard output
ucase	-	utilities	-	Convert a file to upper case
unique	-	lists	-	Delete redundant elements from a list
unlearn	-	language	-	Restore the default parameters for a task or package
unprotect	-	system	-	Remove delete protection from a file
update	-	language	-	Update a task's parameters (flush to disk)
urand	-	utilities	-	Uniform random number generator
velvect	-	plot	-	Plot representation of a velocity field
wait	-	language	-	Wait for all background jobs to complete
wcardimage	-	dataio	-	Convert text files to cardimage files
wfits	-	dataio	-	Convert an IRAF image into a FITS image
while	*	language	-	While loop
window	-	tv	-	Adjust the contrast and dc offset of the current frame
words	-	lists	-	Break a file up into a stream of words
wtar	-	softools	-	Write a TAR format archive file
wtextimage	-	dataio	-	Convert an IRAF image to a text file
xc	-	softools	-	Compile and/or link a program
xyacc	-	softools	-	Build an SPP language parser
zoom	-	tv	-	Zoom in on the image (change magnification)

Note: Language package keywords are starred. To get help on a keyword enclose it in quotes.