Operand stack manipulation operators

any **pop** -

exch any"1" any"2",any"2" any"1"

any **dup** any any
any_1 .. any_n n **copy** any_1 .. any_n any_1 .. any_n
any_n .. any_0 n **index** any_n .. any_0 any_n
any_{n-1} .. any_0 n j **roll** $any_{(j-1) \bmod n}$ .. any_0 any_{n-1} .. $any_{j \bmod n}$
any_1 .. any_n **clear**
any_1 .. any_n **count** # any_1 .. any_n n
- **mark** mark
mark any_1 .. any_n **cleartomark** -
mark obj_1 .. obj_n **counttomark** mark obj_1 .. obj_n n

Arithmetic and math operators

num_1 num_2 **add** num_3
num_1 num_2 **div** num_3
int_1 int_2 **idiv** int_3
int_1 int_2 **mod** reminder
num_1 num_2 **mul** num_3
num_1 num_2 **sub** num_3
num_1 **abs** num_2
num_1 **neg** num_2
num_1 **ceiling** num_2
num_1 **floor** num_2
num_1 **round** num_2
num_1 **truncate** num_2
num_1 **sqrt** num_2
num den **atan** angle
angle **cos** real
angle **sin** real
base exponent **exp** real
num **ln** real
num **log** real
- **rand** int
int **srand** -
- **rrand** int

Array operators

int **array** arry
- **[** mark
mark obj_0 .. obj_{n-1} **]** array
array **length** int
array index **get** any
array index any **put** -
array index count **getinterval** subarry
$arry_1$ index $arry_2$ **putinterval** -
array **aload** $array_0$ .. $array_{n-1}$ array
any_0 .. any_{n-1} array **astore** arry
$array_1$ $array_2$ **copy** $subarray_2$
array proc **forall** -

Dictionary operators

int **dict** dict
dict **length** int
dict **maxlength** int
dict **begin** -
- **end** -
key value **def** -
key **load** value
key value **store** -
dict key **get** any
dict key any **put** -
dict key **known** bool
key **where** *If found:* dict true
If not found: false
$dict_1$ $dict_2$ **copy** $dict_2$
dict proc **forall** -
- **errordict** dict
- **systemdict** dict
- **userdict** dict
- **currentdict** dict
- **countdictstack** int
array **dictstack** subarray

String operators

int **string** string
string **length** int
string index **get** int
string index int **put** -
string index count **getinterval** substring
$string_1$ index $string_2$ **putinterval** -
$string_1$ $string_2$ **copy** $substring_2$
string proc **forall** -
string seek **anchorsearch** *If found:* post match true
If not found: string false
string seek **search** *If found:* post match pre true
If not found: string false
string **token** *If found:* post any true
If not found: false

Relational, boolean, and bitwise operators

any_1 any_2 **eq** bool
any_1 any_2 **ne** bool
num_1|$string_1$ num_2|$string_2$ **ge** bool
num_1|$string_1$ num_2|$string_2$ **gt** bool
num_1|$string_1$ num_2|$string_2$ **le** bool
num_1|$string_1$ num_2|$string_2$ **lt** bool
$bool_1$|int_1 $bool_2$|int_2 **and** $bool_3$|int_3
$bool_1$|int_1 **not** $bool_2$|int_2
$bool_1$|int_1 $bool_2$|int_2 **or** $bool_3$|int_3
$bool_1$|int_1 $bool_2$|int_2 **xor** $bool_3$|int_3
- **true** true
- **false** false
int_1 shift **bitshift** int_2

Control operators

any **exec** -
bool proc **if** -
bool $proc_1$ $proc_2$ **ifelse** -
init incr limit proc **for** -
count proc **repeat** -
proc **loop** -
- **exit** -
- **stop** -
any **stopped** bool
- **countexecstack** int
array **execstack** subarray
- **quit** -
- **start** -

Type, attribute, and conversion operators

any **type** name
any **cvlit** any
any **cvx** any
any **xcheck** bool
array|file|string **executeonly** array|file|string
array|dict|file|string **noaccess** array|dict|file|string
array|dict|file|string **readonly** array|dict|file|string
array|dict|file|string **rcheck** bool
array|dict|file|string **wcheck** bool
num **cvi** int
string **cvn** name
num|string **cvr** real
any string **cvs** substring
num radix string **cvrs** substring

File operators

$string_1$ $string_2$ **file** file
file **closefile** -
file **read** *If end-of-file:* byte true
If not end-of-file: false
file int **write** -
file string **readhexstring** substring bool
file string **writehexstring** -

file string **readstring** substring bool
file string **writestring** -
file string **readline** substring bool
file **token** *If found:* any true
If not found: false
file **bytesavailable** int
- **flush** -
file **flushfile** -
file **resetfile** -
file **status** bool
string **run** -
- **currentfile** file
string **print** -
any **=** -
any_1 .. any_n **stack** # any_1 .. any_n
any **==** -
any_1 any_n **pstack** # any_1 any_n
- **prompt** -
bool **echo** -

Virtual memory operators

- **save** save
save **restore** -
- **vmstatus** level used maximum

Miscellaneous operators

proc **bind** proc
- **null** null
- **usertime** int
- **version** string

Graphics state operators

- **gsave** -
- **grestore** -
- **grestoreall** -
- **initgraphics** -
num **setlinewidth** -
- **currentlinewidth** num
int **setlinecap** -
- **currentlinecap** int
int **setlinejoin** -
- **currentlinejoin** int
num **setmiterlimit** -
- **curentmiterlimit** num
array offset **setdash** -
- **currentdash** array offset
num **setflat** -
- **currentflat** num
num **setgray** -
- **currentgray** num
hue satur bright **sethsbcolor** -
- **currenthsbcolor** hue satur bright
red green blue **setrgbcolor** -
- **currentrgbcolor** red green blue
frequency rotation proc **setscreen** -
- **currentscreen** frequency rotation proc
proc **settransfer** -
- **currenttransfer** proc

Coordinate system and matrix operators

- **matrix** matrix
- **initmatrix** -
matrix **identmatrix** matrix
matrix **defaultmatrix** matrix
matrix **currentmatrix** matrix
matrix **setmatrix** -
t_x t_y **translate** -
t_x t_y matrix **translate** matrix
s_x s_y **scale** -
s_x s_y matrix **scale** matrix
angle **rotate** -
angle matrix **rotate** matrix
matrix **concat** -
$matrix_1$ $matrix_2$ $matrix_3$ **concatmatrix** $matrix_3$
x y **transform** x' y'
x y matrix **transform** x' y'
xd yd **dtransform** xd' yd'
xd yd matrix **dtransform** xd' yd'
x' y' **itransform** x y
x' y' matrix **itransform** x y
xd' yd' **idtransform** xd yd
xd' yd' matrix **idtransform** xd yd
$matrix_1$ $matrix_2$ **invertmatrix** $matrix_2$

Path construction operators

- **newpath** -
- **currentpoint** x y
x y **moveto** -
d_x d_y **rmoveto** -
x y **lineto** -
d_x d_y **rlineto** -
x y r ang_1 ang_2 **arc** -
x y r ang_1 ang_2 **arcn** -
x_1 y_1 x_2 y_2 r **arcto** xt_1 yt_1 xt_2 yt_2
x_1 y_1 x_2 y_2 x_3 y_3 **curveto** -
dx_1 dy_1 dx_2 dy_2 dx_3 dy_3 **rcurveto** -
- **closepath** -
- **flattenpath** -
- **reversepath** -
- **strokepath** -
string bool **charpath** -
- **clippath** -
- **pathbbox** ll_x ll_y ur_x ur_y
move line curve close **pathforall** -
- **initclip** -
- **clip** -
- **eoclip** -

Painting operators

- **erasepage** -
- **fill** -
- **eofill** -
- **stroke** -
width height bits/sample matrix proc **image** -
width height invert matrix proc **imagemask** -

Device setup and output operators

- **showpage** -
- **copypage** -
matrix width height proc **banddevice** -
matrix width height proc **framedevice** -
- **nulldevice** -
proc **renderbands** -

Character and font operators

key font **definefont** font
key **findfont** font
font num **scalefont** font'
font matrix **makefont** font'
font **setfont** -
- **currentfont** font
string **show** -
a_x a_y string **ashow** -
c_x c_y char a_x a_y string **widthshow** -
c_x c_y char a_x a_y string **awidthshow** -
proc string **kshow** -
string **stringwidth** w_x w_y
- **FontDirectory** dict
- **StandardEncoding** array

Font cache operators

- **cachestatus** bsz bmx msz mmx csz cmx maxbits
w_x w_y ll_x ll_y ur_x ur_y **setcachedevice** -
w_x w_y **setcharwidth** -
num **setcachelimit** -

PostScript