MP attributes backends bit bit32 blobs boolean buffers builders caches callbacks catcodes characters chemistry commands containers context converters coroutine ctxrunner debug dir directives document documentdata environment epdf experiments figures **file** floats fontloader fonts functions global graphics gzip imm interactions interfaces io jit job languages layouts lfs libraries lmx logs lpdf lpeg ltn12 lua luatex lxml math mathematics mbox md5 metapost mime moduledata modules mp mplib noads mode nodes number objects os packa pagebuilders parametersets pdf pdfscanner physics profiler publications regimes resolvers sandbox scripts set socket sorters statistics **status** storage streams tring structures table tex texconditionals texconstants texifs texisdefined texmodes texsystemmodes thirddata tokens tracers trackers typesetters unicode url userdata utilities vf visualizers xml zip zlib

# ConT<sub>E</sub>Xt MkIV

# global (alias: \_G)

LUATEVVERCTON	numbon	611 a	+abla
LUATEXVERSION	number	file	table
MP	table	floats	table
_LUAVERSION	number	font	table
_MAJORVERSION	number	fontloader	table
_MINORVERSION	number	fonts	table
arg	table	frozen	boolean
assert	function	functions	table
attributes	table	gcinfo	function
backends	table	getfenv	function
bit	table	getmetatable	function
bit32	table	getpos	function
blobs	table	getvpos	function
boolean	table	global	table
buffers	table	graphics	table
builders	table	gregorian_to_jalali	function
caches	table	gzip	table
callback	table	img	table
callbacks	table	inspect	function
catcodes	table	interactions	table
characters	table	interfaces	table
chemistry	table	io	table
collectgarbage	function	ipairs	function
commands	table	jalali_to_gregorian	function
containers	table	jit	table
context	function	job	table
converters	table	lang	table
coroutine	table	languages	table
ctxrunner	table	last	number
debug	table	layouts	table
dimen	function	lfs	table
dir	table	libraries	table
directives	table	lmx	table
document	table	load	function
documentdata	table	loadfile	function
dofile	function	loadstring	function
done	boolean	logs	table
environment	table	lpdf	table
epdf	table	lpeg	table
error	function	ltn12	table
experiments	table	lua	table
figures	table	luatex	table

lxml	table	scripts	table
math	table	select	function
mathematics	table	set	table
mbox	table	setfenv	function
md5	table	setinspector	function
metapost	table	setmetatable	function
mime	table	socket	table
module	function	sorters	table
moduledata	table	statistics	table
modules	table	status	table
mp	function	storage	table
mplib	table	streams	table
newproxy	function	string	table
next	function	structures	table
noads	table	swiglib	function
node	table	table	table
nodes	table	tex	table
number	table	texconditionals	data table
objects	table	texconfig	table
optionalrequire	function	texconstants	data table
0S	table	texifs	data table
package	table	texio	table
pagebuilders	table	texisdefined	function
pairs	function	texmodes	data table
parametersets	table	texsystemmodes	data table
pcall	function	thirddata	table
pdf	table	toboolean	function
pdfboolean	function	tokens	table
pdfnull	function	tonumber	function
pdfreference	function	tostring	function
pdfscanner	table	tracers	table
pdfverbose	function	trackers	table
physics	table	type	function
print	function	typesetters	table
profiler	table	unicode	table
publications	table	unpack	function
rawequal	function	url	table
rawget	function	userdata	table
rawlen	function	utf	table
rawset	function	utilities	table
regimes	table	vf	table
require	function	visualizers	table
resolvers	table	xml	table
sandbox	table	xpcall	function

zip table
zlib table

## attributes (context)

colorintents table	D models
N attribute	F mpcolor
D data	F mpnamedcolor
F enable	F mpoptions
F handler	F namedcolorattributes
F register	U none
D registered	F popset
colors table	F processcolorcomponents
N attribute	F pushset
F cmyk	F register
F cmyktogray	D registered
F cmyktorgb	F registerspotcolor
F colorcomponents	F rgb
D counts	F rgbtocmyk
B couple	F rgbtogray
F currentmodel	F rgbtohsv
F currentnamedmodel	N selector
D data	F setlist
N default	F setmodel
F defineintermediatecolor	F setpagecolormodel
F definemultitonecolor	D sets
F defineprocesscolor	F spec
F definesimplegray	F spot
F definespotcolor	F spotcolorname
F definetransparency	F spotcolorparent
F enable	F spotcolorvalue
F filter	B supported
F forcedmodel	F transparencycomponents
F forcesupport	B triggering
F formatcolor	F usecolors
F formatgray	D valid
F getpagecolormodel	F value
F gray	D values
F graytohsv	B weightgray
F handler	<b>define</b> function
F hsvtogray	<b>effects</b> table
F hsvtorgb	N attribute
F iccprofile	D data
F isblack	F enable
N main	F handler
S model	F register

D registered N hardlight D values N hue handlers table N lighten list data table N luminosity data table names N multiply negatives table N none N attribute N normal D data N overlav F enable N saturation F handler N screen N softlight F register D registered U none F set F register numbers data table D registered ofnode function B supported private function B triggering public function F value restore function D values save function unsetvalue number showcurrent function viewerlayers table table states N attribute F disabletriggering F cleanup F enabletriggering D data F finalize F define F initialize F definedlayoutcomponent F process F enable F selective F forcesupport F handler F stacked F stacker B hasorder function system D listwise transparencies table F register N attribute D registered D data F resolve begin F enable F resolve end F resolve\_reset F forcesupport F handler F resolve step T names D scopes F setfeatures N color N colorburn F start N colordodae F stop N darken B supported N difference D values

N exclusion

#### backends (context)

F getpos

codeinjections table F getpreviewfigure F boxresourcedimensions F getypos F hasmatrix F registerboxresource F restoreboxresource F insertrenderingwindow current strina F mergebookmarks defaults table F mergereferences T codeiniections F mergeviewerlayers F prerollreference F gethpos F presetsymbol F getmatrix F getpos F presetsymbollist F aetypos F processrendering F hasmatrix F registerdocumentcloseaction T nodeinjections F registerdocumentopenaction T registrations F registeredsymbol D tables F registerpagecloseaction install function F registerpageopenaction nodeinjections table F registersymbol F restore F setfieldcalculationset F save F setfigurealternative F transform F setfigurecolorspace nothina function F setfiguremask pdf table F setformat T codeiniections F setformsmethod F addbookmarks F setpagetransition F attachmentid F setupcanvas F clonefield F setupidentity F definefield F setxmpfile F definefieldset F startlaver F defineviewerlaver F startunicodetoactualtext F embedfile F stoplayer F enabletags F stopunicodetoactualtext F exportformdata F supportedformats F getbookmarks F unicodetoactualtext F getdefaultfieldvalue F useviewerlayer F getfieldcategory F validfield F getfieldset F validfieldcategory F getformatoption F validfieldset S comment F gethpos F getmatrix T nodeinjections F getoutputfilename F addtags

F annotation

F attachfile

F changestackedlayer

F cmykcolor F comment

F destination

F effect

F graycolor

F injectbitmap
F insertmovie

F insertsound

F insertswf

F insertu3d

F knockout

F negative

F overprint

F positive

F reference

F rgbcolor F spotcolor

F startlayer

F startstackedlayer

F stoplayer

F stopstackedlayer

F transparency

 ${\sf F} \ {\sf typesetfield}$ 

T registrations

F cmykindexcolor

F cmykspotcolor

F getspotcolorreference

F grayindexcolor

F grayspotcolor

F rgbindexcolor

F rgbspotcolor

F spotcolorname

F transparency

T tables

D vfspecials

registrations table
tables table

# bit (context)

arshift	function	lshift	function
band	function	rol	function
bnot	function	ror	function
bor	function	rshift	function
bswap	function	tobit	function
bxor	function	tohex	function

# bit32 (basic lua)

arshift	function	extract	function
band	function	lrotate	function
bnot	function	lshift	function
bor	function	replace	function
btest	function	rrotate	function
bxor	function	rshift	function

## blobs (context)

append	function	strht	function
dimensions	function	strwd	function
dispose	function	tohpack	function
new	function	tonodes	function
pack	function	tovpack	function
strdp	function	write	function
strhd	function		

## boolean (context)

tocontext function
tonumber function

## buffers (context)

append	function	F define	
assign	function	F hassomecontent	
collectcontent	function	F next	
erase	function	F place	
exists	function	F reset	
getcontent	function	F save	
getlines	function	prepend	function
loadcontent	function	raw	function
parallel	table	undent	function

## builders (context)

kernel	table	T regis	tered
F hyphen	ation	F reset	:
F kernin	g	F set	
F ligatu	ring	F split	:
F mlist_	to_hlist	F start	:
T origin	als	F stop	
F hyphe	enate	F tag	
F kerni	ing	profiling	table
F ligat	turing	F add	
paragraph	<b>s</b> table	F distance	
T constr	uctors	F fixedpro	file
N attri	ibute	F get	
F defir	ne	F list	
F disab	ble	F pagehand	ler
F enabl	le	F profileb	ox
F hand	ler	F set	
T metho	ods	vspacing	table
F bas	sic	F analyze	
F def	ault	D categori	es
F hpa	nck	F collapse	vbox
F one	eline	T data	
D names	S	D map	
D numbe	ers	D skip	
F set		D snapme	thods
F start	t	F definesn	apmethod
F stop		B fixed	
T expans	ion	F pagehand	ler
F trace	e	F resetpre	vdepth
F keepto	gether	F setmap	
F regist	ertogether	F setskip	
T soluti	ons	F snapbox	
T split	tters	F tocatego	ries
F def	ine	F tocatego	ry
F opt	imize	F vboxhand	ler

## caches (context)

ask	boolean	hashed	function
base	string	is_writable	function
collapsecontent	function	loadcontent	function
configfiles	function	loaddata	function
contentstate	function	more	string
defaults	table	relocate	boolean
define	function	savecontent	function
direct	boolean	savedata	function
force	boolean	setfirstwritablefile	function
getfirstreadablefile	function	setluanames	function
<pre>getfirstreadablefile_TEST_ME_FIRST</pre>	function	tree	string
getreadablepaths	function	treehash	function
getwritablepath	function	usedpaths	function

#### callback (basic tex)

find function
list function

register overloaded function

#### callbacks (context)

freeze function
known function
list data table
pop function

push function
register function
report function

#### catcodes (context)

names data table
numbers data table

register function

## characters (context)

activeoffset	number	linebreaks	table
adobename	function	S ai	cabec
bidi	data table	S al	
blockrange	function	S b2	
blocks	data table	S ba	
casemap	table	S bb	
categories	data table	S bk	
category	function	S cb	
categorytags	data table	S cj	
collapsed	data table	S cl	
contextname	function	S cm	
csletters	data table	S cp	
data	data table	S cr	
decomposed	data table	S ex	
description	function	S gl	
descriptions	data table	S h2	
detailtags	data table	S h3	
directions	table	S hl	
enccodes	data table	S hy	
entities	data table	S id	
fallbacks	data table	S in	
filters	data table	S is	
fractions	table	S jl	
fromnumber	function	S jt	
fschars	data table	S jv	
fscodes	data table	S lf	
getrange	function	S nl	
graphemes	data table	S ns	
hangul	data table	S nu	
initialize	function	S op	
is_character	data table	S po	
is_command	data table	S pr	
is_letter	data table	S qu	
is_mark	data table	S ri	
is_punctuation	data table	S sa	
is_spacing 	data table	S sg	
lcchars	data table	S sp	
lccode	function	S sy	
lccodes	data table	S wj	
lettered	function	S xx	
lhash	data table	S zw	

lower function math table mathpairs data table mirrors table otfscripts data table ranges data table registerentities function remap hangul syllabe function setactivecatcodes function setlettercatcodes function shape function shaped function data table shash shchars data table shcodes data table showstring function **specialchars** data table data table **specials** splits table

subscripts table
superscripts table
synonyms data table
tex table

D accentmapping
D commandmapping
F defineaccents
F safechar
F toutf

F toutfpattern textclasses table tonumber function ucchars data table uccode function uccodes data table uhash data table unicodechar function function upper

T char

#### chemistry (context)

component	function	
define	function	
definitions	data table	
format	string	
inlinechemical	function	
instance	string	
method	string	

molecule
moleculeparser
start
stop
structures
undefine
function
function
function
function

## containers (context)

cleanname	function	is_valid	function
content	function	read	function
define	function	usecache	boolean
is_usable	function	write	function

#### converters (context)

A	function	isleapyear	function
A:es	function	lchexnumber	function
AK	function	lchexnumbers	function
Alphabetic	function	leapyear	function
Alphabetic:es	function	lower	function
Character	function	max	function
Characters	function	maxchrs	function
I	function	minute	function
KA	function	month	function
KR	function	nicenumber	function
R	function	nofdays	function
RK	function	number	function
Romannumerals	function	numbers	function
Sloviannumerals	function	octnumber	function
Spanishnumerals	function	octstringtonumber	function
Word	function	ordinal	function
Words	function	r	function
a	function	rawcharacter	function
a:es	function	romannumerals	function
abjadnodotnumerals	function	second	function
abjadnumerals	function	sequences	data table
alphabetic	function	settime	function
alphabetic:es	function	sloviannumerals	function
character	function	spanishnumerals	function
characters	function	textime	function
chineseallnumerals	function	toabjad	function
chinesecapnumerals	function	tochinese	function
chinesenumerals	function	toroman	function
chr	function	totime	function
chrs	function	uchexnumber	function
cn	function	uchexnumbers	function
cn-a	function	upper	function
cn-c	function	verbose	table
convert	function	D data	
decimals	function	F translate	
define	function	weekday	function
hexstringtonumber	function	word	function
hour	function	words	function
i	function	year	function

## coroutine (basic lua)

create	function	status	function
resume	function	wrap	function
running	function	yield	function

#### ctxrunner (context)

load function prepfiles data table
preparedfile function resolve function

# debug (basic lua)

debug	function	setfenv	function
getfenv	function	sethook	function
gethook	function	setlocal	function
getinfo	function	setmetatable	function
getlocal	function	setupvalue	function
getmetatable	function	setuservalue	function
getregistry	function	traceback	function
getupvalue	function	upvalueid	function
getuservalue	function	upvaluejoin	function

# dir (context)

collectpattern	function	globpattern	function
current	function	ls	function
expandname	function	makedirs	function
found	function	mkdirs	function
glob	function	pop	function
globfiles	function	push	function

## directives (context)

data	data table	name	string
default	function	register	function
disable	function	report	function
done	table	reset	function
enable	function	show	function
list	function	value	function

#### document (context)

arguments files functions getargument getfilename options data table table table function function table D modes
D modules
targument

function setargument setcommandline function setdefaultargument function setenvironments function setfilename function setfilenames function setmodes function setmodules function variables data table

D environments
D modes
D modules

T commandline

D environments

T ctxfile

## environment (context)

argument	function	luafile	function
arguments	data table	luafilechunk	function
basicengines	data table	maxnofruns	number
currentrun	number	originalarguments	data table
default_texmfcnf	string	outputfilename	string
definefilefallback	function	ownbin	string
definefilesynonym	function	ownmain	string
engineflags	data table	ownname	string
filename	string	ownpath	string
files	table	prerollrun	boolean
filesynonyms	data table	rawarguments	data table
forcedruns	number	reconstructcommandline	function
getargument	function	relativepath	function
homedir	string	setargument	function
initex	boolean	splitarguments	function
initializearguments	function	suffix	string
initializefilenames	function	texfile	function
inputfilebarename	string	texmfos	string
inputfilename	string	texos	string
inputfilesuffix	string	texroot	string
jobfilename	string	truefilename	function
jobfilesuffix	string	useluamodule	function
jobname	string	usemodules	function
kindofrun	number	validengines	data table
loadexamodes	function	version	string
loadluafile	function		

#### epdf (extra tex)

Array function
Attribute function
AttributeOwner\_Type function
Attribute\_Type function
Dict function
Object function

PDFRectangle
StructElement\_Type
open
openMemStream

function function overloaded function function

#### experiments (context)

data	data table	
default	function	
disable	function	
enable	function	
list	function	
name	string	

register function report function show function value function

#### figures (context)

applvratio badname bases bitmapimage boxnumber cachepaths check checkers converters current defaultdepth defaultheight defaultsearch defaultwidth done dummy existers exists formats found get getrealpage auess hash identifiers identify images

F boxes
F check
F checksize
F clone
F copy
F immediatewrite
F keys

F new F node function function data table function number data table function data table data table function number number hool ean number function function data table function data table data table function function function function data table function

table

F ofindex
F package
F print
F scan
F serialize
F totable
F types
F write
include
includers
initialize

includers initialize loaded localpaths magics mergegoodies nofprocessed order paths patterns pop preferguality programs push registerpattern registerresource registersuffix resources scale set setlookups setmemstream setorder setpaths suffixes used

function data table function data table data table data table function number data table data table data table function boolean data table function function function function data table function function function function function function data table data table

#### file (basic lua)

addsuffix	function	needsupdating	function
basename	function	pathpart	function
checksum	function	readdata	function
collapsepath	function	removesuffix	function
сору	function	replacesuffix	function
dirname	function	reslash	function
expandname	function	robustname	function
extname	function	savechecksum	function
is_qualified_path	function	savedata	function
is_readable	function	size	function
is_rootbased_path	function	splitbase	function
is_writable	function	splitname	function
isreadable	function	splitpath	function
iswritable	function	strip	function
join	function	suffix	function
joinpath	function	suffixes	function
loadchecksum	function	suffixesonly	function
nameonly	function	suffixonly	function
nametotable	function	syncmtimes	function
needs_updating	function		

# floats (context)

analysemethod	function	nofstacked	function
checkedpagefloat	function	pop	function
collect	function	push	function
consult	function	resave	function
flush	function	save	function
getvariable	function	stacked	function
hasstacked	function		

#### font (basic tex)

current function
define function
each function
fonts table
frozen function

getfont overloaded function

id function
max function
nextid function
read\_tfm function
read\_vf function

setfont overloaded function

## fontloader (extra tex)

apply\_afmfile function
apply\_featurefile function
close function
fields function
fullinfo function

info
open
to\_table
totable

overloaded function overloaded function function function

## fonts (context)

analyzers	table	F checkenabled
T features		F clonevector
N blwf		F define
N fin2		T definitions
N fin3		F found
N fina		F prepare
N half		F process
N init		F registermain
N isol		F report
N med2		F reset
N medi		T vectors
N pref		<pre>constructors table</pre>
N pstf		F addcoreunicodes
N rphf		F aftercopyingcharacters
D initializers		F applymanipulators
D methods		F assignmathparameters
F setstate		B autocleanup
T states		F beforecopyingcharacters
N blwf		D cache
N fin2		B cacheintex
N fin3		F calculatescale
N fina		F checkedfeatures
N half		F checkedfilename
N init		F checkvirtualids
N isol		F cleanuptable
N mark		F collectprocessors
N med2		F currentfonthasfeature
N medi		D designsizes D dontembed
N pref N pstf		F enhanceparameters
N rest		T enhancers
N rest		T afm
B useunicodemarks		F apply
checkers	table	F patch
F getmissing		T patches
F missing		F register
F placeholder		F register
cid	table	T otf
F getmap		F addfeature
F loadfile		F apply
collections	table	F enhance

5	- 1
F patch	F chainposition
T patches	F chainsubstitution
F register	F kern
F register	F ligature
T tfm	F multiple
F apply	F pair
F patch	F substitution
T patches	F register
F register	S stepkey
F register	F dataset
N factor	S defaultbasealternate
T features	S defaultnodealternate
D afm	D features
D otf	F featuresprocessor
D tfm	F getactualtext
F finalize	F getalternate
F getfeatureaction	F getgsub
T handlers	F getkern
T afm	F getmultiple
B autoprefixed	F getsubstitution
D cache	T handlers
D features	F devanagari_remove_joiners
F getkern	F devanagari_reorder_matras
T helpdata	F devanagari_reorder_pre_base_reordering_consonants
D bothkerned	F devanagari_reorder_reph
D leftkerned	F gpos_context
D ligatures	F gpos_contextchain
D rightkerned	F gpos_cursive
D texligatures	F gpos_mark2base
F load	F gpos_mark2ligature
T readers	F gpos_mark2mark
F getinfo	F gpos_pair
F loadfont	F gpos_single
F setfeatures	F gsub_alternate
B syncspace	F gsub_context
N version	F gsub_contextchain
T otf	F gsub_ligature
F addfeature	F gsub_multiple
F basemodeinitializer	F gsub_reversecontextchain
D cache	F gsub_single
F collectlookups	F trigger_space_kerns
T coverup	F load
T actions	F modeinitializer
F alternate	F nodemodeinitializer

E packautlines	F readcardinal1
F packoutlines	
D pdfcache	F readcardinal2 F readcardinal3
T readers	
F addunicodetable	F readcardinal4
D cache	F readchar
F cff	F readfixed4
F checkhash	F readinteger
F cmap	F readinteger1
F colr	F readinteger2
F compact	F readinteger3
F cpal	F readinteger4
F expand	F readstring
F extend	F readtag
F gdef	F setposition
F getcomponents	F size
F getinfo	F skip
F glyf	F skiplong
F gpos	F skipshort
F gsub	F writebyte
F head	F writecardinal2
F hhea	F writecardinal4
F hmtx	F writestring
F kern	F svg
F loadfont	N tableversion
F loadshapes	F unifymissing
F loca	F unpack
F math	N version
F maxp	F woff2otf
F name	F scriptandlanguage
F os/2	F setdynamics
F pack	F setfeatures
F post	T statistics
F registerextender	D usedfeatures
F rehash	T svg
T streamreader	F filterglyph
F close	F storepdfdata
F getposition	F topdf
F getsize	D svgcache
F look	B svgenabled
F open	T tables
F read2dot14	D baselines
F readbyte	D features
F readbytes	D featuretypes
F readcardinal	D languages

D scripts	S mathsize
F unpackoutlines	T protrusion
N version	S auto
T pfb	S quad
F loadvector	S scaledpoints
T tfm	S scriptpercentage
F addtounicode	S scriptscriptpercentage
D features	S size
N maxnestingdepth	S slantfactor
N maxnestingsize	S slantperpoint
F reencode	T spacing
F setfeatures	S extra
N version	S shrink
T vf	S stretch
T combinations	S width
F combine	S units
T combiner	S vfactor
D commands	S xheight
D helpers	T properties
D math	S autoitalicamount
D predefined	S cidinfo
N version	S embedding
D whatever	S encodingbytes
F hashfeatures	S filename
F hashinstance	S finalized
T hashmethods	S fontname
F normal	S format
F virtual	S fullname
F initializefeatures	S hasitalics
T keys	S hasmath
T characters	S mathitalics
T descriptions	S mode
T parameters	S name
S ascender	S noglyphnames
S descender	S nostackmath
S designsize	S psname
T expansion	S textitalics
S auto	S virtualized
S shrink	D loadedfonts
S step	S namemode
S stretch	N noffontsloaded
S extendfactor	N nofsharedfonts
S factor	N nofsharedhashes
S hfactor	N nofsharedvectors
<b></b>	

N privateoffset T aql D privateslots D ctxcodes F readanddefine D extras F registerfeature D names F resetfeature T synonyms B resolvevirtualtoo N Acyrillic F scale N Becvrillic F scaled N Cdot F setfactor N Checyrillic F setfeature N Decyrillic F setname N Djecyrillic B sharefonts N Dzecyrillic F trytosharefont N Dzhecyrillic N version N Ecyrillic current function N Edot currentid function N Efcyrillic definers table N Elcyrillic F addlookup N Emcyrillic F analyze N Encyrillic F applypostprocessors N Ercyrillic F checkedmode N Ereversedcvrillic F checkedscript N Escvrillic F current N Fitacyrillic S defaultlookup N Gcedilla F define N Gdot F getspecification N Gecyrillic F internal N Gheupturncyrillic F loadfont N Gjecyrillic F makespecification N Hardsigncyrillic T methods N IAcyrillic F install N IUcyrillic D variants N Icyrillic F read N Tdot F register N Iecyrillic F registered N Iicyrillic F registersplit N Iishortcyrillic F resetnullfont N Iocyrillic F resolve N Izhitsacyrillic T resolvers N Jecyrillic F file N Kacyrillic F name N Kcedilla F spec N Khacyrillic definetypeface function N Kjecyrillic encodings table N Lcedilla

N Ljecyrillic	N blackrectangle
N Ncedilla	N blackrightpointingpointer
N Njecyrillic	N blacksmilingface
N Ocyrillic	N blacksquare
N Odblacute	N blackuppointingtriangle
N Ohm	N bulletinverse
N Pecyrillic	N cdot
N Rcedilla	N compass
N Shacyrillic	N dagesh
N Shchacyrillic	N dalet
N Softsigncyrillic	N daletdagesh
N Tcedilla	N dalethatafpatah
N Tecyrillic	N dalethatafpatahhebrew
N Tsecyrillic	N dalethatafsegol
N Tshecyrillic	N dalethatafsegolhebrew
N Ucyrillic	N dalethebrew
N Udblacute	N dalethiriq
N Ushortcyrillic	N dalethiriqhebrew
N Vecyrillic	N daletholam
N Yatcyrillic	N daletholamhebrew
N Yericyrillic	N daletpatah
N Yicyrillic	N daletpatahhebrew
N Zdot	N daletqamats
N Zecyrillic	N daletqamatshebrew
N Zhecyrillic	N daletqubuts
N acutecmb	N daletqubutshebrew
N acyrillic	N daletsegol
N afii00208	N daletsegolhebrew
N afii08941	N daletsheva
N afii57694	N daletshevahebrew
N afii57695	N dalettsere
N afii57700	N dammaarabic
N afii57705	N dammatanaltonearabic
N afii57723	N dargahebrew
N alef	N dbllowline
N alefmaksurainitialarabic	N decimalseparatorarabic
N alefmaksuramedialarabic	N dialytikatonos
N approximatelyequal	N dotbelowcmb
N asteriskaltonearabic	N doubleyodpatah
N ayin	N doubleyodpatahhebrew
N bet	N edot
N betdagesh	N eightarabic
N blackdownpointingtriangle	N eighthnotebeamed
N blackleftpointingpointer	N etnahtafoukhhebrew

N hatafsegol N etnahtafoukhlefthebrew N etnahtahebrew N hatafsegol17 N fathaarabic N hatafsegol24 N finalkaf N hatafsegol30 N finalkafdagesh N hatafsegolhebrew N finalkafhebrew N hatafsegolnarrowhebrew N finalkafgamats N hatafsegolguarterhebrew N finalkafgamatshebrew N he N finalkafsheva N hedagesh N finalmem N hehfinalalttwoarabic N finalnun N het N finalpe N hiria N finaltsadi N hirig14 N fivearabic N hiria21 N forall N hiria2d N fourarabic N hiriahebrew N gcedilla N hirignarrowhebrew N gdot N hiriqquarterhebrew N holam N gimel N gimeldagesh N holam19 N gravecmb N holam26 N haaltonearabic N holam32 N hamzaarabic N holamhebrew N hamzadammaarabic N holamnarrowhebrew N hamzadammatanarabic N holamquarterhebrew N hamzafathaarabic N ilde N hamzafathatanarabic N integralbottom N hamzalowarabic N integraltop N hamzalowkasraarabic N kaf N hamzalowkasratanarabic N kafdagesh N hatafpatah N kashidaautoarabic N hatafpatah16 N kashidaautonosidebearingarabic N hatafpatah23 N kcedilla N hatafpatah2f N lamed N hatafpatahhebrew N lameddagesh N hatafpatahnarrowhebrew N lamedhebrew N hatafpatahguarterhebrew N lamedholam N hatafgamats N lamedholamdagesh N lamedholamdageshhebrew N hatafqamats1b N hatafqamats28 N laminitialarabic N hatafgamats34 N lammeemjeeminitialarabic N hatafqamatshebrew N lcedilla N hatafqamatsnarrowhebrew N logicalnotreversed N hatafgamatsguarterhebrew N mahapakhhebrew

N mam N qofhatafsegol N memdagesh N gofhatafsegolhebrew N merkhahebrew N gofhebrew N merkhakefulahebrew N qofhiriq N middot N gofhirighebrew N munahhebrew N gofholam N nbspace N gofholamhebrew N gofpatah N ncedilla N newshegelsign N gofpatahhebrew N ninearabic N gofgamats N noonhehinitialarabic N qofqamatshebrew N nun N qofqubuts N nundagesh N qofqubutshebrew N odblacute N qofsegol N onearabic N qofsegolhebrew N overscore N gofsheva N patah N gofshevahebrew N patah11 N qoftsere N patahld N qubuts N patah2a N gubuts18 N patahhebrew N aubuts25 N patahnarrowhebrew N aubuts31 N gubutshebrew N patahquarterhebrew N pe N gubutsnarrowhebrew N pedagesh N qubutsquarterhebrew N qamats N quoteleftreversed N gamats10 N rafe N gamatsla N rcedilla N reharabic N gamats1c N gamats27 N resh N gamats29 N reshhatafpatah N reshhatafpatahhebrew N qamats33 N gamatsde N reshhatafsegol N reshhatafsegolhebrew N gamatshebrew N reshhebrew N gamatsnarrowhebrew N gamatsgatanhebrew N reshhiriq N qamatsqatannarrowhebrew N reshhirighebrew N qamatsqatanquarterhebrew N reshholam N gamatsgatanwidehebrew N reshholamhebrew N gamatsquarterhebrew N reshpatah N reshpatahhebrew N qof N qofdagesh N reshgamats N qofhatafpatah N reshqamatshebrew N gofhatafpatahhebrew N reshaubuts

N	reshqubutshebrew		N thousandsseparatorarabic
N	reshsegol		N threearabic
N	reshsegolhebrew		N tildecmb
	reshsheva		N tipehahebrew
N	reshshevahebrew		N tsadi
N	reshtsere		N tsadidagesh
N	reviahebrew		N tsere
N	samekh		N tsere12
N	samekhdagesh		N tserele
N	segol		N tsere2b
N	segol13		N tserehebrew
N	segol1f		N tserenarrowhebrew
N	segol2c		N tserequarterhebrew
N	segolhebrew		N twoarabic
N	segolnarrowhebrew		N udblacute
N	segolquarterhebrew		N vav
N	sevenarabic		N vavdagesh
N	sfthyphen		N vavdagesh65
N	shaddaarabic		N vavholam
N	sheqel		N yerahbenyomohebrew
N	sheva		N yod
N	sheva115		N yoddagesh
N	sheva15		N zayin
N	sheva22		N zayindagesh
N	sheva2e		N zdot
N	shevahebrew		N zeroarabic
N	shevanarrowhebrew	D	unicodes
N	shevaquarterhebrew	D ca	ache
N	shin	T c	txcodes
N	shindagesh	N	AEacute
N	shindageshshindot	N	AEligature
N	shindageshsindot	N	AEmacron
N	shinshindot	N	Aacute
N	shinsindot	N	Abreve
N	siluqhebrew	N	Abreveacute
N	sixarabic	N	Abrevedotbelow
N	tav	N	Abrevegrave
N	tavdages		Abrevehook
	tavdagesh	N	Abrevetilde
	tcedilla	N	Acaron
	tchehinitialarabic		Acircumflex
	tet		Acircumflexacute
	tetdagesh		Acircumflexdotbelow
	tevirhebrew		Acircumflexgrave
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N Acircumflexhook N Edotaccent N Acircumflextilde N Edotbelow N Adiaeresis N Edoublegrave N Adiaeresismacron N Egrave N Adotaccent N Ehook N Adotaccentmacron N Einvertedbreve N Adotbelow N Emacron N Adoublegrave N Eogonek N Eth N Agrave N Ahook N Etilde N Fhook N Ainvertedbreve N Amacron N Gacute N Aogonek N Gbreve N Aring N Gcaron N Aringacute N Gcircumflex N Astroke N Gcommaaccent N Atilde N Gdotaccent N Bhook N Ghook N Cacute N Gstroke N Ccaron N Hcaron N Ccedilla N Hcircumflex N Ccircumflex N Hstroke N Cdotaccent N IJligature N Chook N Iacute N Cstroke N Threve N DZcaronligature N Icaron N DZligature N Icircumflex N Dafrican N Idiaeresis N Dcaron N Idotaccent N Idotbelow N Dhook N Dstroke N Idoublegrave N Dzcaronligature N Igrave N Dzligature N Thook N Iinvertedbreve N Eacute N Ebreve N Imacron N Ecaron N Iogonek N Ecedilla N Istroke N Ecircumflex N Itilde N Ecircumflexacute N Jcircumflex N Ecircumflexdotbelow N Kcaron N Ecircumflexgrave N Kcommaaccent N Ecircumflexhook N Khook N Ecircumflextilde N LJligature

N Lacute

N Ediaeresis

N Lbar N Ostrokeacute N Lcaron N Otilde N Otildemacron N Lcommaaccent N Phook N Ldotmiddle N Liligature N Racute N Lstroke N Rcaron N NJligature N Rcommaaccent N Nacute N Rdoublegrave N Nearon N Rinvertedbreve N Ncommaaccent N Sacute N Neng N Scaron N Ngrave N Scedilla N Niligature N Schwa N Scircumflex N Ntilde N OEligature N Scommaaccent N Oacute N Tcaron N Obreve N Tcedilla N Ocaron N Tcommaaccent N Ocircumflex N Thook N Ocircumflexacute N Thorn N Ocircumflexdotbelow N Tstroke N Ocircumflexgrave N Uacute N Ocircumflexhook N Ubreve N Ocircumflextilde N Ucaron N Odiaeresis N Ucircumflex N Odiaeresismacron N Udiaeresis N Odotaccent N Udiaeresisacute N Odotaccentmacron N Udiaeresiscaron N Odotbelow N Udiaeresisgrave N Odoublegrave N Udiaeresismacron N Ograve N Udotbelow N Ohook N Udoublegrave N Ohorn N Ugrave N Ohornacute N Uhook N Uhorn N Ohorndotbelow N Ohorngrave N Uhornacute N Ohornhook N Uhorndotbelow N Ohorntilde N Uhorngrave N Ohungarumlaut N Uhornhook N Oinvertedbreve N Uhorntilde N Omacron N Uhungarumlaut N Oogonek N Uinvertedbreve N Oogonekmacron N Umacron N Ostroke N Uogonek

N Uring N aring N Utilde N aringacute N Wcircumflex N atilde N Yacute N bhook N Ycircumflex N breakablethinspace N Ydiaeresis N bstroke N Ydotbelow N cacute N Yaraye N carriagereturn N Yhook N ccaron N Ymacron N ccedilla N Ytilde N ccircumflex N Zacute N ccurl N Zcaron N cdotaccent N Zdotaccent N chook N Zhook N copyright N Zstroke N cstroke N aacute N cyrillicA N abreve N cyrillicAE N abreveacute N cyrillicAbreve N abrevedotbelow N cyrillicAdiaeresis N abrevegrave N cvrillicB N abrevehook N cyrillicBIGYUS N abrevetilde N cyrillicBIGYUSiotified N acaron N cyrillicC N acircumflex N cyrillicCH N acircumflexacute N cyrillicCHEDC N acircumflexdotbelow N cyrillicCHEDCabkhasian N acircumflexgrave N cyrillicCHEabkhasian N acircumflexhook N cyrillicCHEdiaeresis N acircumflextilde N cyrillicCHEkhakassian N adiaeresis N cyrillicCHEvertstroke N adiaeresismacron N cyrillicD N adotaccent N cyrillicDASIAPNEUMATA N adotaccentmacron N cyrillicDJE N adotbelow N cyrillicDZE N adoublegrave N cyrillicDZEabkhasian N aeacute N cyrillicDZHE N aeligature N cyrillicE N aemacron N cyrillicELtail N agrave N cyrillicEMtail N ahook N cyrillicENDC N ainvertedbreve N cyrillicENGHE N amacron N cyrillicENhook

N cyrillicENtail

N aogonek

N cvrillicEREV N cvrillicNJE N cyrillicERY N cyrillic0 N cyrillicERtick N cyrillicOMEGA N cyrillicEbreve N cyrillicOMEGAround N cyrillicEdiaeresis N cyrillic0MEGAtitlo N cyrillicEgrave N cyrillic0T N cvrillicEiotified N cvrillicObarred N cvrillicF N cvrillicObarreddiaeresis N cyrillicFITA N cyrillicOdiaeresis N cyrillicG N cyrillicP N cyrillicGHEmidhook N cyrillicPALATALIZATION N cyrillicGHEstroke N cvrillicPALOCHKA N cyrillicGHEupturn N cyrillicPEmidhook N cyrillicGJE N cyrillicPSI N cyrillicH N cyrillicPSILIPNEUMATA N cyrillicHA N cyrillicR N cyrillicHADC N cyrillicS N cyrillicHRDSN N cyrillicSCHWA N cyrillicI N cyrillicSCHWAdiaeresis N cyrillicIE N cyrillicSDSC N cvrillicII N cvrillicSEMISOFT N cyrillicISHRT N cvrillicSFTSN N cyrillicISHRTtail N cyrillicSH N cyrillicIZHITSA N cyrillicSHCH N cyrillicIZHITSAdoublegrave N cyrillicSHHA N cyrillicIdiaeresis N cyrillicT N cyrillicIgrave N cyrillicTEDC N cyrillicImacron N cyrillicTETSE N cyrillicJE N cyrillicTITL0 N cyrillicK N cyrillicTSHE N cyrillicKADC N cyrillicU N cyrillicKAbashkir N cyrillicUK N cyrillicKAhook N cyrillicUSHRT N cyrillicKAstroke N cyrillicUdiaeresis N cyrillicKAvertstroke N cyrillicUdoubleacute N cyrillicKJE N cyrillicUmacron N cyrillicKOPPA N cyrillicV N cyrillicKSI N cyrillicYA N cyrillicL N cyrillicYAT N cyrillicLITTLEYUS N cyrillicYERUdiaeresis N cyrillicLITTLEYUSiotified N cyrillicYI N cyrillicLJE N cyrillicY0

N cyrillicYU

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N cyrillicM

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N cvrillicYstrstroke N cvrillica N cyrillicZ N cyrillicghemidhook N cyrillicZDSC N cyrillicghestroke N cyrillicZEdiaeresis N cyrillicgheupturn N cyrillicZH N cyrillicgje N cyrillicZHEbreve N cyrillich N cvrillicZHEdescender N cvrillicha N cvrillicZHEdiaeresis N cvrillichadc N cyrillica N cyrillichrdsn N cyrillicabreve N cyrillici N cvrillicadiaeresis N cvrillicidiaeresis N cvrillicae N cvrillicie N cyrillicb N cyrillicigrave N cyrillicbigyus N cvrillicii N cyrillicbigyusiotified N cyrillicimacron N cyrillicc N cvrillicishrt N cyrillicch N cyrillicishrttail N cyrilliccheabkhasian N cyrillicizhitsa N cyrillicchedc N cyrillicizhitsadoublegrave N cyrillicchedcabkhasian N cyrillicje N cvrillicchediaeresis N cvrillick N cyrillicchekhakassian N cvrillickabashkir N cyrillicchevertstroke N cyrillickadc N cyrillicd N cyrillickahook N cyrillicdje N cyrillickastroke N cvrillicdze N cyrillickavertstroke N cyrillicdzeabkhasian N cyrillickje N cyrillicdzhe N cyrillickoppa N cyrillice N cyrillicksi N cyrillicebreve N cyrillicl N cyrillicediaeresis N cyrilliclittleyus N cyrillicegrave N cyrilliclittleyusiotified N cyrilliceiotified N cyrilliclje N cyrilliceltail N cyrillicm N cyrillicemtail N cyrillicn N cyrillicendc N cyrillicnje N cyrillicenghe N cyrillico N cyrillicenhook N cyrillicobarred N cyrillicentail N cyrillicobarreddiaeresis N cyrillicerev N cyrillicodiaeresis N cyrillicertick N cyrillicomega N cyrillicery N cyrillicomegaround N cyrillicf N cyrillicomegatitlo N cyrillicfita N cyrillicot

N cvrillicp N dotlessi N cyrillicpemidhook N dotlessi N cyrillicpsi N dotlessistroke N cyrillicr N dstroke N cyrillics N dtail N cyrillicschwa N dzcaronligature N cvrillicschwadiaeresis N dzligature N cvrillicsdsc N eacute N cyrillicsemisoft N ehreve N cyrillicsftsn N ecaron N cvrillicsh N ecedilla N cvrillicshch N ecircumflex N cyrillicshha N ecircumflexacute N cyrillict N ecircumflexdotbelow N cyrillictedc N ecircumflexgrave N cyrillictetse N ecircumflexhook N cyrillictshe N ecircumflextilde N ediaeresis N cyrillicu N cyrillicudiaeresis N edotaccent N edotbelow N cyrillicudoubleacute N cyrillicuk N edoublegrave N cyrillicumacron N egrave N cyrillicushrt N ehook N cyrillicv N einvertedbreve N cyrillicya N emacron N cyrillicyat N emdash N cyrillicyerudiaeresis N emspace N cyrillicyi N endash N cyrillicyo N enspace N cyrillicystr N eogonek N cyrillicystrstroke N etilde N cyrillicyu N exclamdown N cyrillicz N ffiligature N cyrilliczdsc N ffligature N cyrilliczediaeresis N fflligature N cyrilliczh N fhook N cyrilliczhebreve N figurespace N cyrilliczhedescender N filigature N cyrilliczhediaeresis N fiveeighths N dcaron N fivesixths N dcurl N flligature N dhook N fourfifths

N fourperemspace

N gacute

N dotlessI

N dotlessJ

N abreve N greekEtadasiavaria N greekEtaiotasub N gcaron N gcircumflex N greekEtaiotasubdasia N greekEtaiotasubdasiaperispomeni N gcommaaccent N gdotaccent N greekEtaiotasubdasiatonos N greekAlpha N greekEtaiotasubdasiavaria N greekAlphadasia N greekEtaiotasubpsili N greekAlphadasiaperispomeni N greekEtaiotasubpsiliperispomeni N greekEtaiotasubpsilitonos N greekAlphadasiatonos N greekEtaiotasubpsilivaria N greekAlphadasiavaria N greekAlphaiotasub N greekEtapsili N greekAlphaiotasubdasia N greekEtapsiliperispomeni N greekAlphaiotasubdasiaperispomeni N greekEtapsilitonos N greekAlphaiotasubdasiatonos N greekEtapsilivaria N greekAlphaiotasubdasiavaria N greekEtatonos N greekAlphaiotasubpsili N greekEtavaria N greekAlphaiotasubpsiliperispomeni N greekGamma N greekAlphaiotasubpsilitonos N greekIota N greekAlphaiotasubpsilivaria N greekIotadasia N greekAlphamacron N greekIotadasiaperispomeni N greekAlphapsili N greekIotadasiatonos N greekAlphapsiliperispomeni N greekIotadasiavaria N greekAlphapsilitonos N greekIotadialytika N greekAlphapsilivaria N greekIotamacron N greekAlphatonos N greekIotapsili N greekAlphavaria N greekIotapsiliperispomeni N greekAlphavrachy N greekIotapsilitonos N greekBeta N greekIotapsilivaria N greekChi N greekIotatonos N greekCoronis N greekIotavaria N greekDelta N greekIotavrachy N greekEpsilon N greekKappa N greekEpsilondasia N greekLambda N greekEpsilondasiatonos N greekMu N greekEpsilondasiavaria N greekNu N greekEpsilonpsili N greekOmega N greekEpsilonpsilitonos N greekOmegadasia N greekEpsilonpsilivaria N greekOmegadasiaperispomeni N greekEpsilontonos N greekOmegadasiatonos N greekEpsilonvaria N greekOmegadasiavaria N greekEta N greekOmegaiotasub N greekEtadasia N greekOmegaiotasubdasia N greekEtadasiaperispomeni N greekOmegaiotasubdasiaperispomeni N greekEtadasiatonos N greekOmegaiotasubdasiatonos

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N afii57686	N ahookabove
N afii57687	N aibengali
N afii57688	N aibopomofo
N afii57689	N aideva
N afii57690	N aiecyrillic
N afii57694	N aigujarati

N aigurmukhi N anglebracketleft N aimatragurmukhi N anglebracketleftvertical N ainarabic N anglebracketright N ainfinalarabic N anglebracketrightvertical N aininitialarabic N angleleft N ainmedialarabic N angleright N ainvertedbreve N andstrom N aivowelsignbengali N anoteleia N anudattadeva N aivowelsigndeva N aivowelsigngujarati N anusvarabengali N akatakana N anusvaradeva N akatakanahalfwidth N anusvaraquiarati N akorean N aogonek N alef N apaatosquare N alefarabic N aparen N alefdageshhebrew N apostrophearmenian N aleffinalarabic N apostrophemod N alefhamzaahovearabic N apple N alefhamzaabovefinalarabic N approaches N alefhamzabelowarabic N approxequal N alefhamzabelowfinalarabic N approxequalorimage N alefhebrew N approximatelyequal N aleflamedhebrew N araeaekorean N alefmaddaabovearabic N araeakorean N alefmaddaabovefinalarabic N arc N alefmaksuraarabic N arighthalfring N alefmaksurafinalarabic N aring N alefmaksurainitialarabic N aringacute N alefmaksuramedialarabic N aringbelow N alefpatahhebrew N arrowboth N arrowdashdown N alefgamatshebrew N aleph N arrowdashleft N allequal N arrowdashright N arrowdashup N alpha N arrowdblboth N alphatonos N amacron N arrowdbldown N arrowdblleft N amonospace N arrowdblright N ampersand N ampersandmonospace N arrowdblup N amsquare N arrowdown N anbopomofo N arrowdownleft N angbopomofo N arrowdownright N arrowdownwhite N angkhankhuthai N angle N arrowheaddownmod

N arrowheadleftmod N aturned N arrowheadrightmod N aubengali N arrowheadupmod N aubopomofo N arrowleft N audeva N arrowleftdbl N augujarati N arrowleftdblstroke N augurmukhi N arrowleftoverright N aulengthmarkbengali N arrowleftwhite N aumatragurmukhi N arrowright N auvowelsignbengali N arrowrightdblstroke N auvowelsigndeva N arrowrightheavy N auvowelsigngujarati N arrowrightoverleft N avagrahadeva N arrowrightwhite N aybarmenian N arrowtableft N ayin N arrowtabright N ayinaltonehebrew N arrowup N avinhebrew N arrowundn N b N arrowupdnbse N babengali N arrowupdownbase N backslash N arrowupleft N backslashmonospace N arrowupleftofdown N badeva N arrowupright N bagujarati N arrowupwhite N bagurmukhi N asciicircum N bahiragana N asciicircummonospace N bahtthai N asciitilde N hakatakana N asciitildemonospace N bar N ascript N barmonospace N ascriptturned N bbopomofo N asmallhiragana N bcircle N asmallkatakana N bdotaccent N asmallkatakanahalfwidth N bdotbelow N asterisk N heamedsixteenthnotes N asteriskaltonearabic N because N asteriskarabic N becyrillic N asteriskmath N beharabic N behfinalarabic N asteriskmonospace N asterisksmall N behinitialarabic N asterism N behiragana N asymptoticallyequal N behmedialarabic N at N behmeeminitialarabic N atilde N behmeemisolatedarabic N behnoonfinalarabic N atmonospace

N bekatakana

N atsmall

N benarmenian N bobaimaithai N het N bohiragana N beta N bokatakana N betasymbolgreek N bparen N betdagesh N bgsguare N betdageshhebrew N braceleft N bethebrew N braceleftmonospace N betrafehebrew N braceleftsmall N bhabengali N braceleftvertical N hhadeva N braceright N bhaguiarati N bracerightmonospace N bhagurmukhi N bracerightsmall N bhook N bracerightvertical N bihiragana N bracketleft N bikatakana N bracketleftmonospace N bilabialclick N bracketright N bindigurmukhi N bracketrightmonospace N birusquare N breve N blackcircle N brevehelowomb N blackdiamond N brevecmb N blackdownpointingtriangle N breveinvertedbelowcmb N blackleftpointingpointer N breveinvertedcmb N blackleftpointingtriangle N breveinverteddoublecmb N blacklenticularbracketleft N bridgebelowcmb N blacklenticularbracketleftvertical N bridgeinvertedbelowcmb N blacklenticularbracketright N brokenbar N blacklenticularbracketrightvertical N bstroke N blacklowerlefttriangle N btopbar N blacklowerrighttriangle N buhiragana N blackrectangle N bukatakana N blackrightpointingpointer N bullet N blackrightpointingtriangle N bulletinverse N blacksmallsquare N bulletoperator N blacksmilingface N bullseye N c N blacksquare N blackstar N caarmenian N blackupperlefttriangle N cabengali N blackupperrighttriangle N cacute N blackuppointingsmalltriangle N cadeva N blackuppointingtriangle N cagujarati N blank N cagurmukhi N blinebelow N calsquare N block N candrabindubengali N bmonospace N candrabinducmb

N candrabindudeva N chochangthai N candrabinduqujarati N chochanthai N capslock N chochingthai N careof N chochoethai N caron N chook N caronbelowcmb N cieucacirclekorean N caroncmb N cieucaparenkorean N carriagereturn N cieuccirclekorean N cbopomofo N cieuckorean N ccaron N cieucparenkorean N ccedilla N cieucuparenkorean N ccedillaacute N circle N ccircle N circlemultiply N ccircumflex N circleot N ccurl N circleplus N cdot N circlepostalmark N cdotaccent N circlewithlefthalfblack N cdsquare N circlewithrighthalfblack N cedilla N circumflex N cedillacmb N circumflexbelowcmb N cent N circumflexcmb N centigrade N clear N clickalveolar N centmonospace N chaarmenian N clickdental N chabengali N clicklateral N chadeva N clickretroflex N chaqujarati N club N chagurmukhi N clubsuitblack N chbopomofo N clubsuitwhite N cheabkhasiancyrillic N cmcubedsquare N checkmark N cmonospace N checyrillic N cmsquaredsquare N chedescenderabkhasiancyrillic N coarmenian N chedescendercyrillic N colon N chedieresiscyrillic N colonmonetary N cheharmenian N colonmonospace N chekhakassiancyrillic N colonsign N cheverticalstrokecyrillic N colonsmall N chi N colontriangularhalfmod N chieuchacirclekorean N colontriangularmod N chieuchaparenkorean N comma N chieuchcirclekorean N commaabovecmb N chieuchkorean N commaaboverightcmb N chieuchparenkorean N commaarabic

	commaarmenian		cornerbracketleft
	commamonospace		cornerbracketlefthalfwidth
	commareversedabovecmb		cornerbracketleftvertical
	commareversedmod		cornerbracketright
	commasmall		cornerbracketrighthalfwidth
	commaturnedabovecmb		cornerbracketrightvertical
	commaturnedmod		corporationsquare
N	compass		cosquare
	congruent	N	coverkgsquare
	contourintegral		cparen
N	control		cruzeiro
N	controlACK	N	cstretched
N	controlBEL	N	curlyand
N	controlBS	N	curlyor
N	controlCAN	N	currency
N	controlCR	N	d
N	controlDC1	N	daarmenian
N	controlDC2	N	dabengali
N	controlDC3	N	dadarabic
N	controlDC4	N	dadeva
N	controlDEL	N	dadfinalarabic
N	controlDLE	N	dadinitialarabic
N	controlEM	N	dadmedialarabic
N	controlENQ	N	dagesh
N	controlEOT	N	dageshhebrew
N	controlESC	N	dagger
N	controlETB	N	daggerdbl
N	controlETX	N	dagujarati
N	controlFF	N	dagurmukhi
N	controlFS	N	dahiragana
N	controlGS	N	dakatakana
N	controlHT	N	dalarabic
N	controlLF	N	dalet
N	controlNAK	N	daletdagesh
N	controlRS	N	daletdageshhebrew
N	controlSI	N	dalethatafpatah
N	controlSO	N	dalethatafpatahhebrew
N	controlSOT	N	dalethatafsegol
N	controlSTX	N	dalethatafsegolhebrew
N	controlSUB	N	dalethebrew
N	controlSYN	N	dalethiriq
N	controlUS	N	dalethiriqhebrew
N	controlVT	N	daletholam
N	copyright	N	daletholamhebrew

N daletpatah N ddabengali N daletpatahhebrew N ddadeva N ddagujarati N daletgamats N daletqamatshebrew N ddagurmukhi N daletqubuts N ddalarabic N ddalfinalarabic N daletqubutshebrew N daletsegol N dddhadeva N daletsegolhebrew N ddhabengali N daletsheva N ddhadeva N daletshevahehrew N ddhagujarati N dalettsere N ddhagurmukhi N dalettserehebrew N ddotaccent N dalfinalarabic N ddotbelow N dammaarabic N decimalseparatorarabic N dammalowarabic N decimalseparatorpersian N dammatanaltonearabic N decyrillic N dammatanarabic N dearee N danda N dehihebrew N dargahebrew N dehiragana N dargalefthebrew N deicoptic N dasiapneumatacyrilliccmb N dekatakana N dblanglebracketleft N deleteleft N dblanglebracketleftvertical N deleteright N dblanglebracketright N delta N dblanglebracketrightvertical N deltaturned N dblarchinvertedbelowcmb N denominatorminusonenumeratorbengali N dblarrowleft N dezh N dblarrowright N dhabengali N dbldanda N dhadeva N dblgravecmb N dhaqujarati N dblintegral N dhagurmukhi N dbllowline N dhook N dbllowlinecmb N dialytikatonos N dbloverlinecmb N dialytikatonoscmb N diamond N dblprimemod N dblverticalbar N diamondsuitwhite N dblverticallineabovecmb N dieresis N dbopomofo N dieresisbelowcmb N dbsquare N dieresiscmb N dcaron N dieresistonos N dcedilla N dihiragana N dcircle N dikatakana N dcircumflexbelow N dittomark N dcroat N divide

N divides Νe N divisionslash N eacute N djecyrillic N earth N dkshade N ebengali N dlinebelow N ebopomofo N dlsquare N ebreve N dmacron N ecandradeva N dmonospace N ecandraquiarati N dnblock N ecandravowelsigndeva N dochadathai N ecandravowelsigngujarati N dodekthai N ecaron N dohiragana N ecedillabreve N dokatakana N echarmenian N dollar N echyiwnarmenian N dollarmonospace N ecircle N dollarsmall N ecircumflex N dona N ecircumflexacute N ecircumflexbelow N dorusquare N ecircumflexdotbelow N dotaccent N dotaccentcmb N ecircumflexgrave N dotbelowcmb N ecircumflexhookabove N ecircumflextilde N dotbelowcomb N dotkatakana N ecyrillic N dotlessi N edblgrave N dotlessi N edeva N dotlessjstrokehook N edieresis N dotmath N edot N dottedcircle N edotaccent N doubleyodpatah N edotbelow N doubleyodpatahhebrew N eegurmukhi N downtackbelowcmb N eematragurmukhi N downtackmod N efcyrillic N dparen N egrave N dtail N equiarati N eharmenian N dtopbar N duhiragana N ehbopomofo N dukatakana N ehiragana N dz N ehookabove N dzaltone N eibopomofo N dzcaron N eight N dzcurl N eightarabic N dzeabkhasiancyrillic N eightbengali N dzecyrillic N eightcircle N dzhecyrillic N eightcircleinversesansserif

N endashvertical N eightdeva N eighteencircle N endescendercyrillic N eighteenparen N eng N eighteenperiod N engbopomofo N eightgujarati N enghecyrillic N eightgurmukhi N enhookcyrillic N eighthackarabic N enspace N eighthangzhou N eogonek N eighthnotebeamed N eokorean N eightideographicparen N eopen N eightinferior N eopenclosed N eightmonospace N eopenreversed N eightparen N eopenreversedclosed N eightperiod N eopenreversedhook N eightpersian N eparen N eightroman N ensilon N eightsuperior N epsilontonos N eightthai N equal N einvertedbreve N equalmonospace N eiotifiedcyrillic N equalsmall N ekatakana N equalsuperior N ekatakanahalfwidth N equivalence N ekonkargurmukhi N erbopomofo N ekorean N ercyrillic N elcvrillic N ereversed N element N ereversedcyrillic N elevencircle N escyrillic N elevenparen N esdescendercyrillic N elevenperiod N esh N elevenroman N eshcurl N ellipsis N eshortdeva N eshortvowelsigndeva N ellipsisvertical N emacron N eshreversedloop N emacronacute N eshsquatreversed N esmallhiragana N emacrongrave N emcyrillic N esmallkatakana N emdash N esmallkatakanahalfwidth N emdashvertical N estimated N emonospace N eta N emphasismarkarmenian N etarmenian N emptyset N etatonos N enbopomofo N eth N encyrillic N etilde

N etildebelow

N endash

N etnahtafoukhhebrew N fifteenperiod N etnahtafoukhlefthebrew N figuredash N etnahtahebrew N filledbox N filledrect N etnahtalefthebrew N eturned N finalkaf N eukorean N finalkafdagesh N euro N finalkafdageshhebrew N evowelsignbengali N finalkafhebrew N evowelsigndeva N finalkafgamats N evowelsigngujarati N finalkafgamatshebrew N exclam N finalkafsheva N exclamarmenian N finalkafshevahebrew N exclamdbl N finalmem N finalmemhebrew N exclamdown N finalnun N exclammonospace N existential N finalnunhebrew N ezh N finalpe N ezhcaron N finalpehebrew N ezhcurl N finaltsadi N ezhreversed N finaltsadihebrew N ezhtail N firsttonechinese Nf N fisheve N fadeva N fitacyrillic N fagurmukhi N five N fahrenheit N fivearabic N fathaarabic N fivebengali N fathalowarabic N fivecircle N fivecircleinversesansserif N fathatanarabic N fbopomofo N fivedeva N fcircle N fiveeighths N fdotaccent N fivequjarati N feharabic N fivegurmukhi N feharmenian N fivehackarabic N fehfinalarabic N fivehangzhou N fehinitialarabic N fiveideographicparen N fiveinferior N fehmedialarabic N feicoptic N fivemonospace N female N fiveparen N ff N fiveperiod N ffi N fivepersian N ffl N fiveroman N fi N fivesuperior N fifteencircle N fivethai N fifteenparen N fl

N florin N gahiragana N fmonospace N gakatakana N fmsquare N gamma N fofanthai N gammalatinsmall N fofathai N gammasuperior N fongmanthai N gangiacoptic N forall N gbopomofo N four N abreve N fourarabic N gcaron N fourbengali N gcedilla N fourcircle N gcircle N fourcircleinversesansserif N gcircumflex N fourdeva N gcommaaccent N fourgujarati N gdot N fourgurmukhi N gdotaccent N fourhackarabic N gecyrillic N fourhangzhou N gehiragana N fourideographicparen N gekatakana N fourinferior N geometricallyequal N fourmonospace N gereshaccenthebrew N fournumeratorbengali N gereshhebrew N fourparen N gereshmuqdamhebrew N germandbls N fourperiod N fourpersian N gershayimaccenthebrew N fourroman N gershayimhebrew N foursuperior N getamark N fourteencircle N ghabengali N fourteenparen N ghadarmenian N fourteenperiod N ghadeva N fourthai N ghaqujarati N fourthtonechinese N ghagurmukhi N fparen N ghainarabic N fraction N ghainfinalarabic N franc N ghaininitialarabic N ghainmedialarabic Ng N gabengali N ghemiddlehookcyrillic N ghestrokecyrillic N gacute N gadeva N gheupturncyrillic N gafarabic N ghhadeva N gaffinalarabic N ghhagurmukhi N gafinitialarabic N ghook N gafmedialarabic N ghzsquare N gagujarati N gihiragana

N gikatakana

N gagurmukhi

N gimarmenian N auilsinalriaht N gimel N gukatakana N gimeldagesh N guramusquare N gimeldageshhebrew N gysquare N gimelhebrew Νh N haabkhasiancyrillic N gjecyrillic N glottalinvertedstroke N haaltonearabic N habengali N glottalstop N glottalstopinverted N hadescendercyrillic N glottalstopmod N hadeva N glottalstopreversed N hagujarati N glottalstopreversedmod N hagurmukhi N glottalstopreversedsuperior N haharabic N hahfinalarabic N glottalstopstroke N glottalstopstrokereversed N hahinitialarabic N gmacron N hahiragana N gmonospace N hahmedialarabic N gohiragana N haitusquare N gokatakana N hakatakana N hakatakanahalfwidth N gparen N gpasquare N halantgurmukhi N gradient N hamzaarabic N hamzadammaarabic N grave N gravebelowcmb N hamzadammatanarabic N gravecmb N hamzafathaarabic N gravecomb N hamzafathatanarabic N hamzalowarabic N gravedeva N gravelowmod N hamzalowkasraarabic N hamzalowkasratanarabic N gravemonospace N gravetonecmb N hamzasukunarabic N greater N hangulfiller N greaterequal N hardsigncyrillic N greaterequalorless N harpoonleftbarbup N greatermonospace N harpoonrightbarbup N greaterorequivalent N hasquare N greaterorless N hatafpatah N greateroverequal N hatafpatah16 N greatersmall N hatafpatah23 N gscript N hatafpatah2f N gstroke N hatafpatahhebrew N guhiragana N hatafpatahnarrowhebrew N guillemotleft N hatafpatahquarterhebrew N guillemotright N hatafpatahwidehebrew

N hatafgamats

N quilsinglleft

N hatafgamats1b N hekatakana N hatafgamats28 N hekatakanahalfwidth N hatafgamats34 N hekutaarusquare N hatafgamatshebrew N henghook N hatafgamatsnarrowhebrew N herutusquare N hatafgamatsquarterhebrew N het N hatafgamatswidehebrew N hethebrew N hatafsegol N hhook N hatafsegol17 N hhooksuperior N hatafsegol24 N hieuhacirclekorean N hatafsegol30 N hieuhaparenkorean N hatafsegolhebrew N hieuhcirclekorean N hatafsegolnarrowhebrew N hieuhkorean N hatafsegolquarterhebrew N hieuhparenkorean N hatafsegolwidehebrew N hihiragana N hbar N hikatakana N hbopomofo N hikatakanahalfwidth N hbrevebelow N hiriq N hcedilla N hiriq14 N hcircle N hirig21 N hcircumflex N hiria2d N hdieresis N hiriahebrew N hdotaccent N hirignarrowhebrew N hdotbelow N hirigguarterhebrew N he N hiriawidehebrew N heart N hlinebelow N heartsuitblack N hmonospace N heartsuitwhite N hoarmenian N hohipthai N hedagesh N hedageshhebrew N hohiragana N hehaltonearabic N hokatakana N heharabic N hokatakanahalfwidth N hehebrew N holam N hehfinalaltonearabic N holam19 N hehfinalalttwoarabic N holam26 N hehfinalarabic N holam32 N hehhamzaabovefinalarabic N holamhebrew N hehhamzaaboveisolatedarabic N holamnarrowhebrew N hehinitialaltonearabic N holamquarterhebrew N hehinitialarabic N holamwidehebrew N hehiragana N honokhukthai N hehmedialaltonearabic N hookabovecomb N hehmedialarabic N hookcmb

N hookpalatalizedbelowcmb

N heiseierasquare

N hookretroflexhelowcmb N ideographicexcellentcircle N hoonsquare N ideographicfestivalparen N horicoptic N ideographicfinancialcircle N horizontalbar N ideographicfinancialparen N hornemb N ideographicfireparen N hotsprings N ideographichaveparen N house N ideographichighcircle N hnaren N ideographiciterationmark N hsuperior N ideographiclaborcircle N hturned N ideographiclaborparen N huhiragana N ideographicleftcircle N huiitosquare N ideographiclowcircle N hukatakana N ideographicmedicinecircle N hukatakanahalfwidth N ideographicmetalparen N hungarumlaut N ideographicmoonparen N hungarumlautcmb N ideographicnameparen N hv N ideographicperiod N hyphen N ideographicprintcircle N hyphenmonospace N ideographicreachparen N hyphensmall N ideographicrepresentparen N hyphentwo N ideographicresourceparen Νi N ideographicrightcircle N iacute N ideographicsecretcircle N iacyrillic N ideographicselfparen N ibengali N ideographicsocietyparen N ibopomofo N ideographicspace N ibreve N ideographicspecialparen N icaron N ideographicstockparen N icircle N ideographicstudyparen N icircumflex N ideographicsunparen N icyrillic N ideographicsuperviseparen N idblgrave N ideographicwaterparen N ideographearthcircle N ideographicwoodparen N ideographfirecircle N ideographiczero N ideographicallianceparen N ideographmetalcircle N ideographiccallparen N ideographmooncircle N ideographiccentrecircle N ideographnamecircle N ideographicclose N ideographsuncircle N ideographiccomma N ideographwatercircle N ideographiccommaleft N ideographwoodcircle N ideographiccongratulationparen N ideva N idieresis N ideographiccorrectcircle N idieresisacute N ideographicearthparen N ideographicenterpriseparen N idieresiscyrillic

N idothelow N intisquare N iebrevecyrillic N invbullet N iecyrillic N invcircle N ieungacirclekorean N invsmileface N ieungaparenkorean N iocyrillic N ieungcirclekorean N iogonek N ieungkorean N iota N ieungparenkorean N intadieresis N igrave N iotadieresistonos N iqujarati N intalatin N iaurmukhi N iotatonos N ihiragana N iparen N ihookabove N irigurmukhi N iibengali N ismallhiragana N iicyrillic N ismallkatakana N iideva N ismallkatakanahalfwidth N iiqujarati N issharbengali N istroke N iigurmukhi N iimatragurmukhi N iterationhiragana N iinvertedbreve N iterationkatakana N iishortcvrillic N itilde N iivowelsignbengali N itildebelow N iivowelsigndeva N iubopomofo N iivowelsigngujarati N iucyrillic Nii N ivowelsignbengali N ikatakana N ivowelsigndeva N ikatakanahalfwidth N ivowelsigngujarati N ikorean N izhitsacyrillic N ilde N izhitsadblgravecyrillic N iluyhebrew Νį N imacron N jaarmenian N imacroncyrillic N jabengali N imageorapproximatelyequal N jadeva N imatragurmukhi N jagujarati N imonospace N jagurmukhi N increment N jbopomofo N infinity N icaron N iniarmenian N jcircle N integral N jcircumflex N integralbottom N jcrossedtail N integralbt N jdotlessstroke N integraltop N jecyrillic N integraltp N jeemarabic N intersection N jeemfinalarabic

N jeeminitialarabic N kasmallkatakana N jeemmedialarabic N kasquare N jeharabic N kasraarabic N jehfinalarabic N kasratanarabic N jhabengali N kastrokecyrillic N jhadeva N katahiraprolongmarkhalfwidth N jhagujarati N kaverticalstrokecvrillic N jhagurmukhi N kbopomofo N jheharmenian N kcalsquare N kcaron N jis N jmonospace N kcedilla N jparen N kcircle N jsuperior N kcommaaccent Nk N kdotbelow N kabashkircyrillic N keharmenian N kabengali N kehiragana N kacute N kekatakana N kekatakanahalfwidth N kacyrillic N kadescendercyrillic N kenarmenian N kadeva N kesmallkatakana N kaf N kareenlandic N kafarabic N khabengali N kafdagesh N khacyrillic N kafdageshhebrew N khadeva N kaffinalarabic N khagujarati N kafhebrew N khaqurmukhi N kafinitialarabic N khaharabic N kafmedialarabic N khahfinalarabic N kafrafehebrew N khahinitialarabic N khahmedialarabic N kagujarati N kagurmukhi N kheicoptic N kahiragana N khhadeva N kahookcyrillic N khhagurmukhi N kakatakana N khieukhacirclekorean N kakatakanahalfwidth N khieukhaparenkorean N kappa N khieukhcirclekorean N kappasymbolgreek N khieukhkorean N kapyeounmieumkorean N khieukhparenkorean N kapyeounphieuphkorean N khokhaithai N kapyeounpieupkorean N khokhonthai N kapyeounssangpieupkorean N khokhuatthai N karoriisquare N khokhwaithai N khomutthai N kashidaautoarabic N kashidaautonosidebearingarabic N khook

N khorakhangthai	N lagurmukhi
N khzsquare	N lakkhangyaothai
N kihiragana	N lamaleffinalarabic
N kikatakana	${\tt N}$ lamalefhamzaabovefinalarabic
N kikatakanahalfwidth	N lamalefhamzaaboveisolatedarabic
N kiroguramusquare	${\tt N}$ lamalefhamzabelowfinalarabic
N kiromeetorusquare	N lamalefhamzabelowisolatedarabic
N kirosquare	N lamalefisolatedarabic
N kiyeokacirclekorean	N lamalefmaddaabovefinalarabic
N kiyeokaparenkorean	N lamalefmaddaaboveisolatedarabic
N kiyeokcirclekorean	N lamarabic
N kiyeokkorean	N lambda
N kiyeokparenkorean	N lambdastroke
N kiyeoksioskorean	N lamed
N kjecyrillic	N lameddagesh
N klinebelow	N lameddageshhebrew
N klsquare	N lamedhebrew
N kmcubedsquare	N lamedholam
N kmonospace	N lamedholamdagesh
N kmsquaredsquare	N lamedholamdageshhebrew
N kohiragana	N lamedholamhebrew
N kohmsquare	N lamfinalarabic
N kokaithai	N lamhahinitialarabic
N kokatakana	N laminitialarabic
N kokatakanahalfwidth	N lamjeeminitialarabic
N kooposquare	N lamkhahinitialarabic
N koppacyrillic	N lamlamhehisolatedarabic
N koreanstandardsymbol	N lammedialarabic
N koroniscmb	N lammeemhahinitialarabic
N kparen	N lammeeminitialarabic
N kpasquare	N lammeemjeeminitialarabic
N ksicyrillic	N lammeemkhahinitialarabic
N ktsquare	N largecircle
N kturned	N lbar
N kuhiragana	N lbelt
N kukatakana	N lbopomofo
N kukatakanahalfwidth	N lcaron
N kvsquare	N lcedilla
N kwsquare	N lcircle
Nl	N lcircumflexbelow
N labengali	N lcommaaccent
N lacute	N ldot
N ladeva	N ldotaccent
N lagujarati	N ldotbelow

N ldotbelowmacron N luthai N leftangleabovecmb N lvocalicbengali N lefttackbelowcmb N lvocalicdeva N less N lvocalicvowelsignbengali N lessequal N lvocalicvowelsigndeva N lessequalorgreater N lxsquare N lessmonospace N m N lessorequivalent N mahengali N macron N lessorgreater N lessoverequal N macronhelowcmh N macroncmb N lesssmall N lezh N macronlowmod N lfblock N macronmonospace N lhookretroflex N macute N lira N madeva N liwnarmenian N maqujarati Nli N magurmukhi N ljecyrillic N mahapakhhebrew N lladeva N mahapakhlefthebrew N llaqujarati N mahiragana N llinebelow N maichattawathai N llladeva N maiekthai N llvocalicbengali N maihanakatthai N llvocalicdeva N maitaikhuthai N llvocalicvowelsignbengali N maithothai N llvocalicvowelsigndeva N maitrithai N lmiddletilde N maiyamokthai N lmonospace N makatakana N makatakanahalfwidth N lmsquare N lochulathai N male N logicaland N mansyonsquare N logicalnot N magafhebrew N logicalnotreversed N mars N masoracirclehebrew N logicalor N lolingthai N masquare N longs N mbopomofo N lowlinecenterline N mbsquare N lowlinecmb N mcircle N lowlinedashed N mcubedsquare N lozenge N mdotaccent N lparen N mdotbelow N lslash N meemarabic N meemfinalarabic N lsquare

N meeminitialarabic

N ltshade

N meemmedialarabic N mmsquaredsquare N meemmeeminitialarabic N mohiragana N meemmeemisolatedarabic N mohmsquare N meetorusquare N mokatakana N mehiragana N mokatakanahalfwidth N meizierasquare N molsquare N mekatakana N momathai N mekatakanahalfwidth N moverssquare N mem N moverssquaredsquare N memdagesh N mparen N memdageshhebrew N mpasquare N memhebrew N mssquare N menarmenian N mturned N merkhahebrew N mu N merkhakefulahebrew N mu1 N merkhakefulalefthebrew N muasquare N merkhalefthebrew N muchgreater N mhook N muchless N mufsquare N mhzsquare N middledotkatakanahalfwidth N mugreek N middot N mugsquare N mieumacirclekorean N muhiragana N mieumaparenkorean N mukatakana N mieumcirclekorean N mukatakanahalfwidth N mieumkorean N mulsquare N mieumpansioskorean N multiply N mumsquare N mieumparenkorean N mieumpieupkorean N munahhebrew N mieumsioskorean N munahlefthebrew N mihiragana N musicalnote N musicalnotedbl N mikatakana N mikatakanahalfwidth N musicflatsign N minus N musicsharpsign N minusbelowcmb N mussquare N minuscircle N muvsquare N minusmod N muwsquare N minusplus N mvmegasquare N minute N mvsquare N miribaarusquare N mwmegasquare N mirisquare N mwsquare N mlonglegturned Νn N mlsquare N nabengali

previous 87 next

N nabla

N nacute

N mmcubedsquare

N mmonospace

N nadeva N nine N nagujarati N ninearabic N nagurmukhi N ninebengali N nahiragana N ninecircle N nakatakana N ninecircleinversesansserif N nakatakanahalfwidth N ninedeva N napostrophe N ninegujarati N nineaurmukhi N nasquare N nbopomofo N ninehackarabic N ninehangzhou N nbspace N ncaron N nineideographicparen N ncedilla N nineinferior N ncircle N ninemonospace N ncircumflexbelow N nineparen N ncommaaccent N nineperiod N ndotaccent N ninepersian N ndotbelow N nineroman N ninesuperior N nehiragana N nineteencircle N nekatakana N nekatakanahalfwidth N nineteenparen N newsheaelsian N nineteenperiod N nfsquare N ninethai N ngabengali Nnj N ngadeva N njecyrillic N ngagujarati N nkatakana N ngagurmukhi N nkatakanahalfwidth N ngonguthai N nlegrightlong N nhiragana N nlinebelow N nhookleft N nmonospace N nhookretroflex N nmsquare N nieunacirclekorean N nnabengali N nieunaparenkorean N nnadeva N nieuncieuckorean N nnagujarati N nieuncirclekorean N nnagurmukhi N nieunhieuhkorean N nnnadeva N nieunkorean N nohiragana N nieunpansioskorean N nokatakana N nieunparenkorean N nokatakanahalfwidth N nieunsioskorean N nonbreakingspace N nieuntikeutkorean N nonenthai N nihiragana N nonuthai N nikatakana N noonarabic N nikatakanahalfwidth N noonfinalarabic N nikhahitthai N noonghunnaarabic

N noonghunnafinalarabic N nundagesh N noonhehinitialarabic N nundageshhebrew N nooninitialarabic N nunhebrew N noonjeeminitialarabic N nvsquare N noonjeemisolatedarabic N nwsquare N noonmedialarabic N nyabengali N noonmeeminitialarabic N nvadeva N noonmeemisolatedarabic N nyagujarati N noonnoonfinalarabic N nyagurmukhi N notcontains Nο N notelement N oacute N notelementof N oangthai N notequal N obarred N notgreater N obarredcyrillic N notgreaternorequal N obarreddieresiscyrillic N notgreaternorless N obengali N notidentical N obopomofo N notless N obreve N notlessnorequal N ocandradeva N notparallel N ocandragujarati N notprecedes N ocandravowelsigndeva N notsubset N ocandravowelsigngujarati N notsucceeds N ocaron N notsuperset N ocircle N nowarmenian N ocircumflex N ocircumflexacute N nparen N ocircumflexdotbelow N nssquare N nsuperior N ocircumflexgrave N ntilde N ocircumflexhookabove N nu N ocircumflextilde N nuhiragana N ocyrillic N nukatakana N odblacute N nukatakanahalfwidth N odblgrave N nuktabengali N odeva N nuktadeva N odieresis N nuktagujarati N odieresiscyrillic N nuktagurmukhi N odotbelow N numbersign N oe N numbersignmonospace N oekorean N numbersignsmall N ogonek N numeralsigngreek N ogonekcmb N numeralsignlowergreek N ograve N numero N ogujarati

N oharmenian

N nun

N ohiragana N oneinferior N ohookabove N onemonospace N ohorn N onenumeratorbengali N ohornacute N oneparen N ohorndotbelow N oneperiod N ohorngrave N onepersian N ohornhookabove N onequarter N ohorntilde N oneroman N ohungarumlaut N onesuperior N oi N onethai N oinvertedbreve N onethird N okatakana N oogonek N okatakanahalfwidth N oogonekmacron N okorean N oogurmukhi N olehebrew N oomatragurmukhi N omacron N oopen N omacronacute N oparen N omacrongrave N openbullet N omdeva N option N ordfeminine N omega N omega1 N ordmasculine N omegacyrillic N orthogonal N omegalatinclosed N oshortdeva N omegaroundcyrillic N oshortvowelsigndeva N omegatitlocyrillic N oslash N omegatonos N oslashacute N omgujarati N osmallhiragana N omicron N osmallkatakana N omicrontonos N osmallkatakanahalfwidth N omonospace N ostrokeacute N one N otcyrillic N onearabic N otilde N onebengali N otildeacute N onecircle N otildedieresis N onecircleinversesansserif N oubopomofo N onedeva N overline N onedotenleader N overlinecenterline N oneeighth N overlinecmb N onegujarati N overlinedashed N onegurmukhi N overlinedblwavy N onehackarabic N overlinewavy

N overscore

N ovowelsignbengali

N ovowelsigndeva

N onehalf

N onehangzhou

N oneideographicparen

N ovowelsigngujarati N patahwidehebrew Νp N pazerhebrew N paampssquare N pbopomofo N paasentosquare N pcircle N pabengali N pdotaccent N pacute N pe N padeva N pecyrillic N pedagesh N pagedown N pageup N pedageshhebrew N peezisquare N pagujarati N pagurmukhi N pefinaldageshhebrew N pahiragana N peharabic N paiyannoithai N peharmenian N pakatakana N pehebrew N palatalizationcyrilliccmb N pehfinalarabic N palochkacyrillic N pehinitialarabic N pansioskorean N pehiragana N paragraph N pehmedialarabic N parallel N pekatakana N parenleft N pemiddlehookcyrillic N parenleftaltonearabic N perafehebrew N parenleftinferior N percent N parenleftmonospace N percentarabic N parenleftsmall N percentmonospace N parenleftsuperior N percentsmall N parenleftvertical N period N periodarmenian N parenright N parenrightaltonearabic N periodcentered N parenrightinferior N periodhalfwidth N parenrightmonospace N periodmonospace N parenrightsmall N periodsmall N parenrightsuperior N perispomenigreekcmb N parenrightvertical N perpendicular N partialdiff N perthousand N paseghebrew N peseta N pashtahebrew N pfsquare N pasquare N phabengali N patah N phadeva N patah11 N phagujarati N patahld N phagurmukhi N patah2a N phi N patahhebrew N phil N patahnarrowhebrew N phieuphacirclekorean

N phieuphaparenkorean

N patahguarterhebrew

N phieuphcirclekorean N postalmark N phieuphkorean N postalmarkface N phieuphparenkorean N pparen N philatin N precedes N phinthuthai N prescription N phisymbolgreek N primemod N phook N primereversed N phophanthai N product N phophungthai N projective N phosamphaothai N prolongedkana N pi N propellor N pieupacirclekorean N propersubset N pieupaparenkorean N propersuperset N pieupcieuckorean N proportion N pieupcirclekorean N proportional N pieupkiyeokkorean N psi N pieupkorean N psicyrillic N pieupparenkorean N psilipneumatacyrilliccmb N pieupsioskiyeokkorean N pssquare N pieupsioskorean N puhiragana N pieupsiostikeutkorean N pukatakana N pieupthieuthkorean N pvsquare N pieuptikeutkorean N pwsquare N pihiragana Nq N pikatakana N gadeva N pisymbolgreek N qadmahebrew N piwrarmenian N gafarabic N plus N qaffinalarabic N plusbelowcmb N qafinitialarabic N pluscircle N gafmedialarabic N plusminus N gamats N plusmod N qamats10 N plusmonospace N qamatsla N plussmall N gamats1c N plussuperior N gamats27 N pmonospace N gamats29 N pmsquare N gamats33 N pohiragana N gamatsde N pointingindexdownwhite N gamatshebrew N pointingindexleftwhite N gamatsnarrowhebrew N pointingindexrightwhite N qamatsqatanhebrew N pointingindexupwhite N qamatsqatannarrowhebrew N pokatakana N gamatsgatanguarterhebrew N poplathai N gamatsgatanwidehebrew

N gamatsquarterhebrew N auestiondown N gamatswidehebrew N questiongreek N qarneyparahebrew N questionmonospace N qbopomofo N quotedbl N gcircle N quotedblbase N ghook N quotedblleft N qmonospace N quotedblmonospace N aof N quotedblprime N gofdagesh N quotedblprimereversed N gofdageshhebrew N quotedblright N qofhatafpatah N quoteleft N qofhatafpatahhebrew N quoteleftreversed N gofhatafsegol N quotereversed N qofhatafsegolhebrew N quoteright N qofhebrew N quoterightn N gofhirig N quotesinglbase N qofhiriqhebrew N quotesingle N qofholam N quotesinglemonospace N qofholamhebrew Νr N qofpatah N raarmenian N qofpatahhebrew N rabengali N qofqamats N racute N qofqamatshebrew N radeva N gofgubuts N radical N qofqubutshebrew N radoverssquare N qofsegol N radoverssquaredsquare N qofsegolhebrew N radsquare N qofsheva N rafe N qofshevahebrew N rafehebrew N goftsere N raqujarati N goftserehebrew N ragurmukhi N qparen N rahiragana N quarternote N rakatakana N rakatakanahalfwidth N qubuts N qubuts18 N ralowerdiagonalbengali N qubuts25 N ramiddlediagonalbengali N qubuts31 N ramshorn N qubutshebrew N ratio N qubutsnarrowhebrew N rbopomofo N qubutsquarterhebrew N rcaron N gubutswidehebrew N rcedilla N question N rcircle N questionarabic N rcommaaccent N questionarmenian N rdblgrave

N	rdotaccent	N	rhadeva
N	rdotbelow	N	rho
N	rdotbelowmacron	N	rhook
N	referencemark	N	rhookturned
N	reflexsubset	N	rhookturnedsuperior
N	reflexsuperset	N	rhosymbolgreek
N	registered	N	rhotichookmod
N	reharabic	N	rieulacirclekorean
N	reharmenian	N	rieulaparenkorean
N	rehfinalarabic	N	rieulcirclekorean
N	rehiragana	N	rieulhieuhkorean
N	rehyehaleflamarabic	N	rieulkiyeokkorean
N	rekatakana	N	rieulkiyeoksioskorean
N	rekatakanahalfwidth	N	rieulkorean
N	resh	N	rieulmieumkorean
N	reshdageshhebrew	N	rieulpansioskorean
N	reshhatafpatah	N	rieulparenkorean
N	reshhatafpatahhebrew	N	rieulphieuphkorean
N	reshhatafsegol	N	rieulpieupkorean
N	reshhatafsegolhebrew	N	rieulpieupsioskorean
N	reshhebrew	N	rieulsioskorean
N	reshhiriq	N	rieulthieuthkorean
N	reshhiriqhebrew	N	rieultikeutkorean
N	reshholam	N	rieulyeorinhieuhkorean
N	reshholamhebrew	N	rightangle
N	reshpatah	N	righttackbelowcmb
N	reshpatahhebrew	N	righttriangle
N	reshqamats	N	rihiragana
N	reshqamatshebrew	N	rikatakana
N	reshqubuts	N	rikatakanahalfwidth
N	reshqubutshebrew	N	ring
N	reshsegol	N	ringbelowcmb
N	reshsegolhebrew	N	ringcmb
N	reshsheva	N	ringhalfleft
N	reshshevahebrew	N	ringhalfleftarmenian
N	reshtsere	N	ringhalfleftbelowcmb
N	reshtserehebrew	N	ringhalfleftcentered
N	reversedtilde	N	ringhalfright
N	reviahebrew	N	ringhalfrightbelowcmb
N	reviamugrashhebrew	N	ringhalfrightcentered
	revlogicalnot	N	rinvertedbreve
N	rfishhook	N	rittorusquare
N	rfishhookreversed	N	rlinebelow
N	rhabengali	N	rlongleg

N rlonaleaturned N sahiragana N rmonospace N sakatakana N rohiragana N sakatakanahalfwidth N rokatakana N sallallahoualavhewasallamarabic N rokatakanahalfwidth N samekh N roruathai N samekhdagesh N rparen N samekhdageshhebrew N rrabengali N samekhhebrew N rradeva N saraaathai N rragurmukhi N saraaethai N saraaimaimalaithai N rreharabic N rrehfinalarabic N saraaimaimuanthai N rrvocalichengali N saraamthai N rrvocalicdeva N saraathai N saraethai N rrvocalicgujarati N rrvocalicvowelsignbengali N saraiithai N rrvocalicvowelsigndeva N saraithai N saraothai N rrvocalicvowelsigngujarati N saraueethai N rthlock N sarauethai N rturned N rturnedsuperior N sarauthai N sarauuthai N ruhiragana N rukatakana N sbopomofo N rukatakanahalfwidth N scaron N rupeemarkbengali N scarondotaccent N rupeesignbengali N scedilla N ruthai N schwa N rvocalicbengali N schwacyrillic N rvocalicdeva N schwadieresiscyrillic N rvocalicqujarati N schwahook N rvocalicvowelsignbengali N scircle N rvocalicvowelsigndeva N scircumflex N rvocalicvowelsigngujarati N scommaaccent N sdotaccent Ns N sabengali N sdotbelow N sacute N sdotbelowdotaccent N sacutedotaccent N seagullbelowcmb N sadarabic N second N sadeva N secondtonechinese N sadfinalarabic N section N sadinitialarabic N seenarabic

N sadmedialarabic N seenfinalarabic N sagujarati N seeninitialarabic N sagurmukhi N seenmedialarabic

N seaol N sfthyphen N segol13 N shaarmenian N segol1f N shabengali N segol2c N shacyrillic N segolhebrew N shaddaarabic N shaddadammaarabic N segolnarrowhebrew N segolquarterhebrew N shaddadammatanarabic N segoltahebrew N shaddafathaarabic N shaddafathatanarahic N segolwidehebrew N seharmenian N shaddakasraarahic N sehiragana N shaddakasratanarabic N sekatakana N shade N sekatakanahalfwidth N shadedark N semicolon N shadelight N semicolonarabic N shademedium N semicolonmonospace N shadeva N semicolonsmall N shaqujarati N semivoicedmarkkana N shagurmukhi N semivoicedmarkkanahalfwidth N shalshelethebrew N sentisquare N shbopomofo N sentosquare N shchacvrillic N sheenarabic N seven N sevenarabic N sheenfinalarabic N sevenbengali N sheeninitialarabic N sevencircle N sheenmedialarabic N sevencircleinversesansserif N sheicoptic N sevendeva N shegel N seveneighths N sheqelhebrew N sevengujarati N sheva N sevengurmukhi N sheval15 N sevenhackarabic N sheva15 N sevenhangzhou N sheva22 N sevenideographicparen N sheva2e N seveninferior N shevahebrew N sevenmonospace N shevanarrowhebrew N sevenparen N shevaquarterhebrew N shevawidehebrew N sevenperiod N shhacyrillic N sevenpersian N sevenroman N shimacoptic N sevensuperior N shin N seventeencircle N shindagesh N seventeenparen N shindageshhebrew N seventeenperiod N shindageshshindot

N shindageshshindothebrew

N seventhai

N shindageshsindot N sixperiod N shindageshsindothebrew N sixpersian N shindothebrew N sixroman N shinhebrew N sixsuperior N shinshindot N sixteencircle N shinshindothebrew N sixteencurrencydenominatorbengali N shinsindot N sixteenparen N shinsindothebrew N sixteenperiod N shook N sixthai N sigma N slash N sigmal N slashmonospace N sigmafinal N slona N sigmalunatesymbolgreek N slongdotaccent N sihiragana N smileface N sikatakana N smonospace N sikatakanahalfwidth N sofpasughebrew N siluahebrew N softhyphen N siluglefthebrew N softsigncyrillic N similar N sohiragana N sindothebrew N sokatakana N siosacirclekorean N sokatakanahalfwidth N siosaparenkorean N soliduslongoverlaycmb N sioscieuckorean N solidusshortoverlaycmb N sioscirclekorean N sorusithai N sioskiveokkorean N sosalathai N sioskorean N sosothai N siosnieunkorean N sosuathai N siosparenkorean N space N spacehackarabic N siospieupkorean N siostikeutkorean N spade N six N spadesuitblack N sixarabic N spadesuitwhite N sixbengali N sparen N sixcircle N squarebelowcmb N sixcircleinversesansserif N squarecc N sixdeva N squarecm N squarediagonalcrosshatchfill N sixgujarati N squarehorizontalfill N sixqurmukhi N sixhackarabic N squarekg N sixhangzhou N squarekm N sixideographicparen N squarekmcapital N sixinferior N squareln N sixmonospace N squarelog N sixparen N squaremq

N squaremil N tadeva N squaremm N taqujarati N squaremsquared N tagurmukhi N squareorthogonalcrosshatchfill N taharabic N squareupperlefttolowerrightfill N tahfinalarabic N tahinitialarabic N squareupperrighttolowerleftfill N squareverticalfill N tahiragana N squarewhitewithsmallblack N tahmedialarabic N srsquare N taisyouerasquare N ssabengali N takatakana N takatakanahalfwidth N ssadeva N tatweelarabic N ssaquiarati N ssangcieuckorean N tau N ssanghieuhkorean N tav N ssangieungkorean N tavdages N ssangkiyeokkorean N tavdagesh N ssangnieunkorean N tavdageshhebrew N tavhebrew N ssangpieupkorean N ssangsioskorean N thar N ssangtikeutkorean N tbopomofo N sterling N tcaron N sterlingmonospace N tccurl N strokelongoverlaycmb N tcedilla N strokeshortoverlaycmb N tcheharabic N subset N tchehfinalarabic N subsetnotequal N tchehinitialarabic N subsetorequal N tchehmedialarabic N tchehmeeminitialarabic N succeeds N suchthat N tcircle N suhiragana N tcircumflexbelow N tcommaaccent N sukatakana N sukatakanahalfwidth N tdieresis N sukunarabic N tdotaccent N summation N tdotbelow N sun N tecyrillic N superset N tedescendercyrillic N teharabic N supersetnotequal N tehfinalarabic N supersetorequal N sysquare N tehhahinitialarabic N syouwaerasquare N tehhahisolatedarabic Νt N tehinitialarabic N tabengali N tehiragana N tackdown N tehjeeminitialarabic

N tehjeemisolatedarabic

N tackleft

N tehmarbutaarabic N thieuthkorean N tehmarbutafinalarabic N thieuthparenkorean N tehmedialarabic N thirteencircle N tehmeeminitialarabic N thirteenparen N tehmeemisolatedarabic N thirteenperiod N tehnoonfinalarabic N thonangmonthothai N tekatakana N thook N tekatakanahalfwidth N thombuthaothai N telephone N thorn N telephoneblack N thothabanthai N telishagedolahebrew N thothanthai N telishagetanahebrew N thothongthai N tencircle N thothungthai N tenideographicparen N thousandcyrillic N tenparen N thousandsseparatorarabic N temperiod N thousandsseparatorpersian N tenroman N three N tesh N threearabic N tet N threebengali N tetdagesh N threecircle N tetdageshhebrew N threecircleinversesansserif N tethebrew N threedeva N tetsecyrillic N threeeighths N tevirhebrew N threequjarati N tevirlefthebrew N threeaurmukhi N thabengali N threehackarabic N thadeva N threehangzhou N thagujarati N threeideographicparen N thagurmukhi N threeinferior N thalarabic N threemonospace N thalfinalarabic N threenumeratorbengali N thanthakhatthai N threeparen N theharabic N threeperiod N thehfinalarabic N threepersian N thehinitialarabic N threequarters N thehmedialarabic N threeroman N threesuperior N thereexists N therefore N threethai N theta N thzsquare N thetal N tihiragana N thetasymbolgreek N tikatakana N thieuthacirclekorean N tikatakanahalfwidth N thieuthaparenkorean N tikeutacirclekorean N thieuthcirclekorean N tikeutaparenkorean

N tikeutkorean N triagdn N tikeutparenkorean N triaglf N tilde N triagrt N tildebelowcmb N triagup N tildecmb N ts N tildecomb N tsadi N tildedoublecmb N tsadidagesh N tildeoperator N tsadidageshhebrew N tildeoverlaycmb N tsadihebrew N tildeverticalcmb N tsecvrillic N timescircle N tsere N tipehahebrew N tsere12 N tipehalefthebrew N tserele N tippigurmukhi N tsere2b N titlocyrilliccmb N tserehebrew N tiwnarmenian N tserenarrowhebrew N tlinebelow N tserequarterhebrew N tmonospace N tserewidehebrew N toarmenian N tshecyrillic N tohiragana N ttabengali N tokatakana N ttadeva N tokatakanahalfwidth N ttagujarati N tonebarextrahighmod N ttagurmukhi N tonebarextralowmod N tteharabic N tonebarhighmod N ttehfinalarabic N tonebarlowmod N ttehinitialarabic N tonebarmidmod N ttehmedialarabic N tonefive N tthabengali N tonesix N tthadeva N tonetwo N tthaqujarati N tonos N tthagurmukhi N tonsquare N tturned N topatakthai N tuhiragana N tortoiseshellbracketleft N tukatakana N tortoiseshellbracketleftsmall N tukatakanahalfwidth N tortoiseshellbracketleftvertical N tusmallhiragana N tortoiseshellbracketright N tusmallkatakana N tortoiseshellbracketrightsmall N tusmallkatakanahalfwidth N tortoiseshellbracketrightvertical N twelvecircle N totaothai N twelveparen N tpalatalhook N twelveperiod N twelveroman N tparen N trademark N twentycircle

N tretroflexhook

N tikeutcirclekorean

N udieresishelow N twentyparen N twentyperiod N udieresiscaron N two N udieresiscyrillic N twoarabic N udieresisgrave N twobengali N udieresismacron N twocircle N udotbelow N twocircleinversesansserif N ugrave N twodeva N ugujarati N twodotenleader N ugurmukhi N twodotleader N uhiragana N twodotleadervertical N uhookabove N twoquiarati N uhorn N twogurmukhi N uhornacute N uhorndotbelow N twohackarabic N twohangzhou N uhorngrave N twoideographicparen N uhornhookabove N twoinferior N uhorntilde N uhungarumlaut N twomonospace N twonumeratorbengali N uhungarumlautcyrillic N uinvertedbreve N twoparen N twoperiod N ukatakana N twopersian N ukatakanahalfwidth N tworoman N ukcyrillic N twostroke N ukorean N twosuperior N umacron N twothai N umacroncyrillic N twothirds N umacrondieresis Νu N umatragurmukhi N uacute N umonospace N ubar N underscore N ubengali N underscoredbl N underscoremonospace N ubopomofo N ubreve N underscorevertical N underscorewavy N ucaron N ucircle N union N ucircumflex N universal N ucircumflexbelow N uogonek N ucyrillic N uparen N udattadeva N upblock N udblacute N upperdothebrew N udblgrave N upsilon N udeva N upsilondieresis

previous 101 next

N upsilondieresistonos

N upsilonlatin

N udieresis

N udieresisacute

N vehinitialarabic N upsilontonos N uptackbelowcmb N vehmedialarabic N uptackmod N vekatakana N uragurmukhi N venus N uring N verticalbar N ushortcyrillic N verticallineabovecmb N usmallhiragana N verticallinebelowcmb N usmallkatakana N verticallinelowmod N usmallkatakanahalfwidth N verticallinemod N ustraightcyrillic N vewarmenian N ustraightstrokecyrillic N vhook N utilde N vikatakana N utildeacute N viramabengali N utildebelow N viramadeva N uubengali N viramagujarati N uudeva N visargabengali N uuqujarati N visargadeva N uugurmukhi N visargagujarati N uumatragurmukhi N vmonospace N uuvowelsignbengali N voarmenian N uuvowelsigndeva N voicediterationhiragana N uuvowelsigngujarati N voicediterationkatakana N uvowelsignbengali N voicedmarkkana N uvowelsigndeva N voicedmarkkanahalfwidth N uvowelsigngujarati N vokatakana Νv N vparen N vadeva N vtilde N vagujarati N vturned N vagurmukhi N vuhiragana N vakatakana N vukatakana N vav Nw N vavdagesh N wacute N vavdagesh65 N waekorean N vavdageshhebrew N wahiragana N vavhebrew N wakatakana N vavholam N wakatakanahalfwidth N vavholamhebrew N wakorean N vavvavhebrew N wasmallhiragana N vavyodhebrew N wasmallkatakana N vcircle N wattosquare N vdotbelow N wavedash

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N wavyunderscorevertical

N wawarabic

N wawfinalarabic

N vecyrillic

N veharabic

N vehfinalarabic

N wawhamzaabovearabic N wohiragana
N wawhamzaabovefinalarabic N wokatakana

N wbsquare N wokatakanahalfwidth

N won

N xeharmenian

N wcircle

N whitecornerbracketleft

N wcircumflex
N wdieresis
N wowaenthai
N wdotaccent
N wdotbelow
N wehiragana
N weierstrass
N wturned
N wekatakana
N wynn

N wekorean N x
N weokorean N xabovecmb
N wgrave N xbopomofo
N whitebullet N xcircle
N whitecircle N xdieresis
N whitecircleinverse N xdotaccent

N whitecornerbracketleftvertical N xi

N whitecornerbracketright N xmonospace
N whitecornerbracketrightvertical N xparen
N whitediamond N xsuperior

N whitediamondcontainingblacksmalldiamond N y

N whitedownpointingsmalltriangle N yaadosquare N whitedownpointingtriangle N yabengali N whiteleftpointingsmalltriangle N yacute N whiteleftpointingtriangle N yadeva N whitelenticularbracketleft N yaekorean N whitelenticularbracketright N yagujarati N whiterightpointingsmalltriangle N yagurmukhi N whiterightpointingtriangle N yahiragana N whitesmallsquare N yakatakana

N whitesmilingface N yakatakanahalfwidth

N whitesquare
N whitestar
N whitetelephone
N whitetortoiseshellbracketleft
N yasmallkatakana

N whitetortoiseshellbracketright N yasmallkatakanahalfwidth

N whiteuppointingsmalltriangle
N whiteuppointingtriangle
N wihiragana
N ycircle
N wikatakana
N ydieresis
N wikorean
N ydotaccent

N wmonospace N ydotbelow

N veharabic N vokatakana N yehbarreearabic N yokatakanahalfwidth N yehbarreefinalarabic N yokorean N yehfinalarabic N yosmallhiragana N yehhamzaabovearabic N yosmallkatakana N yehhamzaabovefinalarabic N yosmallkatakanahalfwidth N yehhamzaaboveinitialarabic N votareek N vehhamzaabovemedialarabic N yoyaekorean N yehinitialarabic N yoyakorean N yehmedialarabic N yoyakthai N yehmeeminitialarabic N yoyingthai N yehmeemisolatedarabic N yparen N yehnoonfinalarabic N ypogegrammeni N yehthreedotsbelowarabic N ypogegrammenigreekcmb N vekorean Nyr N yen N yring N yenmonospace N ysuperior N yeokorean N ytilde N yeorinhieuhkorean N yturned N yerahbenyomohebrew N yuhiragana N yerahbenyomolefthebrew N vuikorean N yericyrillic N vukatakana N yerudieresiscyrillic N yukatakanahalfwidth N yesieungkorean N yukorean N yesieungpansioskorean N yusbigcyrillic N yesieungsioskorean N yusbigiotifiedcyrillic N yetivhebrew N yuslittlecyrillic N ygrave N yuslittleiotifiedcyrillic N yusmallhiragana N yhook N yhookabove N yusmallkatakana N yiarmenian N yusmallkatakanahalfwidth N yicyrillic N yuyekorean N yikorean N yuyeokorean N yinyang N yyabengali N yiwnarmenian N yyadeva N ymonospace Νz N yod N zaarmenian N yoddagesh N zacute N yoddageshhebrew N zadeva N yodhebrew N zagurmukhi N yodyodhebrew N zaharabic N yodyodpatahhebrew N zahfinalarabic N zahinitialarabic N yohiragana N yoikorean N zahiragana

N	zahmedialarabic	N zhedescendercyr	illic
N	zainarabic	N zhedieresiscyri	llic
N	zainfinalarabic	N zihiragana	
N	zakatakana	N zikatakana	
N	zaqefgadolhebrew	N zinorhebrew	
N	zaqefqatanhebrew	N zlinebelow	
N	zarqahebrew	N zmonospace	
N	zayin	N zohiragana	
N	zayindagesh	N zokatakana	
N	zayindageshhebrew	N zparen	
N	zayinhebrew	N zretroflexhook	
N	zbopomofo	N zstroke	
N	zcaron	N zuhiragana	
N	zcircle	N zukatakana	
N	zcircumflex	N version	
N	zcurl	enhanceid	function
N	zdot	expansions	data table
N	zdotaccent	formats	data table
N	zdotbelow	getalternate	function
N	zecyrillic	getdiscexpansion	function
N	zedescendercyrillic	getkern	function
N	zedieresiscyrillic	getmultiple	function
N	zehiragana	getsubstitution	function
N	zekatakana	getters	table
N	zero	T alternate	
N	zeroarabic	F opentype	
N	zerobengali	T kern	
N	zerodeva	F opentype	
	zerogujarati	F type1	
	zerogurmukhi	T multiple	
	zerohackarabic	F opentype	
	zeroinferior	T substitution	
N	zeromonospace	F opentype	
	zeropersian	goodies	table
	zerosuperior	D colorschemes	
	zerothai	T data	
	zerowidthjoiner	T dejavu-math	
	zerowidthnonjoiner	S author	
	zerowidthspace	S comment	
	zeta	S copyright	
	zhbopomofo	B initialized	
	zhearmenian	T mathematics	
	zhebrevecyrillic	T alternates	
N	zhecyrillic	T dotless	

S comment		helpers	table
S feature		F addprivate	
N value		F dimenfactor	
T kerns		F expandglyph	
S name		F fontpatternhass	ize
S version		F getcoloredglyph	
D designsizes		F getdigitwidth	
D filenames		F getparameters	
F getcompositions		F getprivatenode	
T list		F hasprivate	
F load		F indextoslot	
F prepare_feature	S	F name	
F register		F nametoslot	
F registerpostpro	cessor	F setdigitwidth	
F report		F splitfontpatter	n
T suffixes		F tochar	
handlers	table	infofont	function
hashes	table	iterators	table
D characters		F characters	
D csnames		F descriptions	
D descriptions		F glyphs	
D dynamics		loggers	table
D emwidths		F add_placeholder	s
D exheights		D category_to_pla	ceholder
D extensibles		F format	
D features		F onetimemessage	
D identifiers		F register	
D italics		F reportdefinedfo	nts
D lastmathids		F reportusedfeatu	res
D marks		mappings	table
D modes		F addtounicode	
D originals		F fromunicodel6	
D parameters		F loadfile	
T processes		F loadline	
D properties		F makenameparser	
D quads		D overloads	
D resources		F reset	
T setdynamics		F tounicode	
T shapes		F tounicode16	
D spaces		F tounicodel6sequ	ence
D spacings		metapost	table
D unicodes		F boundingbox	
D variants		F boxtomp	
D xheights		F draw	

F fill		T dejavumath
F maxbounds		T options
F output		S extras
F paths		S features
F widthline		T latinmodernmath
F zeroline		T options
mp	table	S extras
D cache		S features
B inline		S goodies
N version		T lucidabrightmathot
names	data table	T options
nulldata	data table	S extras
protrusions	data table	S features
readers	table	S goodies
F afm		T neoeuler
F check_lua		T options
F check_tfm		S extras
F lua		S features
F ofm		T rm
F opentype		T features
F otf		S sc
F pfb		T ss
D sequence		T features
F tfm		S sc
F ttc		T texgyrebonummath
F ttf		T options
F woff		S extras
reserveid	function	S features
select	table	T texgyredejavumath
T alternatives		T options
F bodyfont		S extras
T data		S features
F default		T texgyrepagellamath
T defaults		T options
T asanamath		S extras
T options		S features
S extras		T texgyrescholamath
S features		T options
S goodies		S extras
T cambriamath		S features
T options		T texgyretermesmath
S extras		T options
S features		S extras
S goodies		S features

T xitsmath F typescript T options F userdata S extras setdiscexpansion function specifiers table S features S goodies D contextmerged F definefallbackfamily F contextnumber F definefontfamily D contextnumbers F definefontfamilypreset D contextsetups T extras F contexttostring F features F definecontext F goodies F mergecontext F fallback F presetcontext T fallbacks F registercontext F features F showcontext F filefallback F splitcontext F fontdata D synonyms F fontfallback D variants F fontsynonym symbols table F uselibrary F goodies tables table F mathfallback T methods D data F default F savefont F file F saveoriginal F name tracers table table F style treatments T presets F applyfixes F registerfallback D data S filename F registerfiles F registerfontalternative F ignoredfile F registerfontfamily F report

F textfallback

F typeface

F trace typefaces

table

#### functions (context)

dummy function

#### graphics (context)

#### backgrounds table

F calculatemultipar

F fetchmultipar

F pair

F path

F point

## gzip (extra lua)

close	function	open	function
lines	function	save	function
load	function	suffix	function

## img (basic tex)

boxes	function	ofindex	function
check	function	package	function
checksize	function	print	function
clone	function	scan	function
сору	function	serialize	function
immediatewrite	function	totable	function
keys	function	types	function
new	function	write	function
node	function		

#### interactions (context)

attachments data table D functions fields table D preambles F clone F setpreamble F storecode F define F defineset F storepreamble F insert F usepreamblenow general table F usescripts linkedlists data table F getidentity pages table F setupidentity help table F setpagetransition F collect F setupcanvas table references F reference F register F setclosedocument javascripts table F setclosepage F addtopreamble F setopendocument F code F setopenpage renderings data table D codes soundclips data table F flushpreambles

#### interfaces (context)

addvalidkeys	function	F MPpardata
cachedsetups	data table	F MPplus
cachesetup	function	F MPpos
checkedspecification	function	F MPposset
complete	data table	F MPr
constants	data table	F MPrest
corenamespaces	data table	F MPrs
currentinterface	string	F MPul
currentresponse	string	F MPur
definecommand	function	F MPw
defined	function	F MPx
doifelsemessage	function	F MPxy
elements	data table	F MPxywhd
formats	data table	F MPy
getcheckedparameters	function	F Romannumerals
getmessage	function	F abjadnodotnumerals
getnamespace	function	F abjadnumerals
getsetupstring	function	F addcounter
hashedsetups	data table	F addfeature
implement	function	F addgrapheme
interfacedcommand	function	F addlinklistelement
interfaces	table	F addreplacements
invalidkey	function	F addtocolumnset
message	function	F addtojavascriptpreamble
namespaces	table	F addtolist
F define		F addvalidinterfacekeys
F list		F allinputpaths
registernamespace	function	F alphabetic
scanners	table	F analysefloatmethod
F Alphabetic		F analyzeitemgroup
F Character		F analyzelist
F Characters		F analyzeregister
F MPLIBconvertoutlinetex	t	F applypattern
F MPc		F applytobox
F MPd		F applytofirstcharacter
F MPh		F assignbuffer
F MPll		F autofinishstructurelevels
F MPlr		F autonextspace
F MPls		F autonextstructurelevel
F MPn		F autosetups
F MPp		F autostarttext

F autostoptext F btxloaddefinitionfile F averagecharwidth F btxloadjournallist F bitmapimage F btxloadreplacementfile F blockcolumnset F btxoneorrange F boxtostring F btxpreparelistentries F bposcolumn F btxremapauthor F bposcolumnregistered F btxsavedataset F btxabbreviatediournal F htxsaveiournallist F btxaddentry F btxsetdataset F btxaddjournal F btxsetentry F btxauthor F btxsetregister F btxauthorfield F btxsetspecification F btxauthortoregister F btxsingularorplural F btxcollectlistentries F btxtoregister F btxcurrentfirstnames F btxusedataset F btxcurrentinitials F btxuservariable F btxcurrentiuniors F buildtextaccent F btxcurrentsurnames F character F btxcurrentvons F characters F btxdetail F chardescription F btxdirect F checkcolumnset F btxdoif F checkcountersetup F btxdoifelse F checkedconversion F btxdoifelsecombiinlist F checkedpagefloat F btxdoifelsesameasprevious F checkiniector F checkinterfacechain F btxdoifelseuservariable F btxdoifnot F checktwopassdata F btxexpandedjournal F chemicalcomponent F btxfetchlistentries F chinesenumerals F btxfield F cleanfontname F btxfieldname F cleanupbox F btxfieldtype F cleanuplayers F btxfirstofrange F clonefield F btxflush F collectfloat F btxflushlistcombi F collecthelp F btxflushlistentry F colorcomponents F btxflushmarked F columnsetcurrentcolumn F btxflushpages F columnsetgoto F btxfoundname F columnsetnoto F btxfoundtype F concatcommalist F btxhandlecite F consultfloat F btxhandlenocite F convertbtxdatasettoxml F converteddimen F btxlastofrange

F convertmpstopdf

F btxlistvariant

F copyboxfromcache F defineinsertion F copyposition F defineintermediatecolor F definelabels F cos F definelanguage F cosd F countervalue F definelinefiller F counttwopassdata F definelinkedlist F currentcomponent F definemarking E definemetafont E currentdate F currentdesignsize F definemultitonecolorglobal F currentenvironment F definenamespace F currentposthyphenchar F definenote F currentprehyphenchar F defineparallel F currentproduct F defineparbuilder F currentproject F defineprocesscolordummy F currentreferenceorder F defineprocesscolorglobal F currentsectiontolist F defineprocesscolorlocal F datasetvariable F defineprogram F definereference F dayname F decimals F defineregister F decrementcounter F definerule F decrementedcounter F definesectionlevels F decrementsubcounter F defineshift F definesnapmethod F defineaccents F defineattribute F definespotcolorglobal F definebreakpoint F definestructureblock F definebreakpoints F definestructureset F definecharacterspacing F definetransparency F definechemical F definetransparencyglobal F definecolumnset F definetwopasslist F defineconversion F definetypeface F definecounter F defineviewerlayer F definedlayoutcomponent F depthnumber F definefallbackfamily F digits normal F definefield F digits reverse F definefieldset F directboxfromcache F definefilefallback F directcopyboxfromcache F definefilesynonym F disableautofontscript F definefont one F disabledirectives F definefont two F disableexperiments F definefontfamily F disableiobsave F definefontfamilypreset F disableparbuilder F definefontfeature F disableregime F definefontsolution F disablespellchecking F definehyphenationfeatures F disablestatetriggering

F disablestream F doifelserangeonpage F disabletrackers F doifelsereference F discardfromlist F doifelserighttoleftinbox F doanalvzeframedbox F doifelsesame F doifcommon F doifelsestackedfloats F doifcounter F doifelsesynonymshown F doifelseblack F doifelsesvnonvmused E doifelsehuffer F doifelseurldefined F doifelsecharinfont F doifelseutfmathahove F doifelsecommon F doifelseutfmathaccent F doifelsecontinuewithfile F doifelseutfmathbelow F doifelseconverter F doifelseutfmathfiller F doifelsecounter F doifelsevisualizer F doifelsecurrentfonthasfeature F doiffieldsetelse F doifelsedrawingblack F doifinset F doifelsefieldcategory F doifnotcommon F doifelsefiledefined F doifnotcounter F doifelsefileexist F doifnotecontent F doifelsefirstchar F doifnoteonsamepageasprevious F doifnotinset F doifelsefontpresent F doifelseinelement F doifnotsame F doifelseinputfile F doifposition F doifelseinset F doifsame F doifelseintwopassdata F doprocesstypescriptfile F doifelseleapvear F doreshapeframedbox F doifelselisthasentry F dosaveposition F doifelselisthasnumber F dosavepositionplus F doifelselisthaspage F dosavepositionwhd F doifelselisthastitle F dosetposition F doifelselocfile F dosetpositionbox F doifelsemarking F dosetpositionplus F doifelsemessage F dosetpositionstrut F doifelseobiect F dosetpositionwhd F doifelseobjectreference F dostarttextfile F doifelseolderversion F dostoptextfile F doifelseoverlapping F elapsedtime F doifelseparallel F enableasciimode F doifelseparentfile F enableautofences F doifelsepathexist F enableautofontscript F doifelseposition F enablebackgroundalign F doifelsepositiononpage F enablebackgroundboxes F enablecolor F doifelsepositionsonsamepage

F doifelsepositionsonthispage F doifelsepositionsused F enablecolorintents

F enablecrlf

F enabledirectives F figure mergegoodies F enableexperiments F figure nof registered pages F enablefontcolorschemes F figure pop F enableinteraction F figure push F enablelinefillers F figure register page F enableparbuilder F figure reset F enableregime F figure scale F enablerules F figurefilename F enableshifts F figurefilepath F enablespellchecking F figurefiletype F enablestatetriggering F figurerequest F enablestream F figuresetdimensions F enabletrackers F figurestatus F enabletransparency F figureused F enableutf F filterdefaultreference F enhancelinkedlist F filterreference F enhancelist F finalizebox F enhancereference F findregisterinternal F enhanceregister F findtwopassdata F eposcolumn F finishcolumnsetflush F eposcolumnregistered F finishexport F erasebuffer F firstcountervalue F firstinset F execute F firstsubcountervalue F expandcurrentreference F exportformdata F flushcolumnsetareas F exportreferences F flushcolumnsetcolumn F flushcolumnsetrest F extendregister F extensiblecode F flushfloat F fakeword F flushlabeledfloat F featureattribute F flushnotes F featurelist F flushpageinjectionsafter F feedback F flushpageinjectionsbefore F fetchallmarks F flushpostponedblocks F fetchmultipar F flushpostponednotes F fetchmultishape F flushstream F fetchonemark F flushstreamcopy F fetchposboxes F fontchar F fetchtwomarks F fontcharbyindex F fontcollectionclone F figure check F figure done F fontcollectiondefine F fontcollectionprepare F figure\_dummy F figure\_flush\_registered\_pages F fontcollectionregister F figure identify F fontcollectionreport F figure include F fontcollectionreset

F fontlookupgetkey F getprivatechar F fontlookupgetkeyofindex F getprivateglyphslot F fontlookupinitialize F getprogram F fontlookupnoffound F getrandomdimen F forceendjob F getrandomfloat F forcequitjob F getrandomnumber F formatcolor F getrandomseed F formatoray F getreadfilename F from F getsetupstring F frule F getsomefullstructurenumber F aetbidimode F getsomestructurenumber F getbodyfontsizes F getspecificstructuretitle F getboxfromcache F getstructurelevel F aetbuffer F getstructurenumber F getbufferctxlua F getsubstring F getbuffermkvi F gettexbuffer F getcheckedinterfaceparameters F gettwopassdata F getcurrentprefixspec F gettwopassdatalist F getcurrentreferencemetadata F geturl F getdefaultfieldvalue F getvisual F getdocumentargument F hboxtovbox F getdocumentfilename F helpaction F getelementtag F helpreference F getfieldcategory F hexstringtonumber F getfile F horizontalcode F getfirstcharacter F hour F hyphenatedlist F getfirsttwopassdata F getfloatvariable F hyphenatedurl F immediatemessage F getfullstructurenumber F getinternalcachedlistreference F incrementcounter F getinternallistreference F incrementedcounter F incrementsubcounter F getlasttwopassdata F getmarking F initializejob F getmathdomain F initializemathdomain F initializemathitalics F getmathitalics F getmessage F initializestream F getmpextensions F initializetexdirectives F getmprandomnumber F initializetextrackers F getnaturaldimensions F injectcurrentreference F getnaturalwd F injectcurrentreferencehtdp F getnotestate F injectreference F getobjectdimensions F inlinechemical

F inputfilebarename

F inputfilename

F getobjectreference

F getobjectreferencepage

F inputfilerealsuffix F lpdf adddocumentshade F inputfilesuffix F lpdf addtocatalog F insertattachment F lpdf addtoinfo F insertcomment F lpdf addtonames F insertfield F lpdf addtopageattributes F insertionnumber F lpdf addtopageresources F insertrenderingwindow F lpdf addtopagesattributes F installedlanguages F lpdf collectedresources F installtexdirective F lpdf color F installtextracker F luascript F iobfilename F luathread F lxmlid F jobfilesuffix F languagenumber F markcontent F lastcountervalue F markingnumber F lastsubcountervalue F markingtitle F lchexnumber F markinjector F lchexnumbers F markregionbox F markregionboxcorrected F leapyear F markregionboxtagged F linenumbersstageone F linenumbersstagetwo F markvisualfonts F listaroupindex F mathfraction F listlabel F mathrenderset F listlocation F message F listnamespaces F metapostescaped F listprefixednumber F metapostformatted F listprefixedpage F metapostgraphformat F listrealpage F minute F listsize F mixcleanup F listtitle F mixfinalize F listuserdata F mixflushlist F loadexamodes F mixflushrest F loadfontgoodies F mixgetsplit F loadluamodule F mixsetsplit F loadmapfile F mixstate F molecule F loadmapline F loadspellchecklist F month F loadtypescriptfile F monthmnem F loadvisualizer F monthname F locatefilepath F mpcolor F locfilename F mpflushliteral F mpflushreset F lower F lpdf\_adddocumentcolorspace F mpgettext F lpdf adddocumentextgstate F mpgraphic

F mpoptions

F lpdf adddocumentpattern

F mprunset F pdfstartmirroring F pdfstartrotation F moruntab F pdfstartscaling F mprunvar F mpsetclippath F pdfstopmatrix F mpsetoutercolor F pdfstopmirroring F mpsetsxsy F pdfstoprotation F mpsettext F pdfstopscaling F percentageof F mptexaet F mptexreset F pqfxcolorspec F pickupbuffer F mptexset F mptexsetfrombuffer F pickupmarkedcontent F namedstructureuservariable F pickuppunctuation F namedstructurevariable F placeparallel F naturalwd F popfloat F nbfs F pophyphenation F negatedcolorcomponent F popitaliccorrection F nextcountervalue F poplist F nextparallel F poppath F nextsubcountervalue F poprandomseed F nofconversions F popreferenceprefix F nofdays F popregime F nofstackedfloats F popsectionblock F notedeltapage F postponenotes F noteinternal F prefixedconverted F notelistindex F prepareMPvariable F noteprefixednumber F preparecolumnsetflush F notetitle F presetmathalternate F ntimes F presetsymbollist F number F presettabulate F numbers F prevcountervalue F octnumber F previoussubcountervalue F octstringtonumber F processbodyfontsizes F operatingsystem F processbuffer F ordinal F processcolorcomponents F outputfilename F processedfile F overloadbookmark F processedfiles F overloaderror F processfile F overloadlowercase F processfilemany F overloaduppercase F processfilenone F pageofinternal F processfileonce F pagestaterealpage F processiob

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F parpos
F pdfrotation

F pdfstartmatrix

F processlist

F processsplit

F processregister

F processsynonyms F registernamespace F profilebox F registerobject F purefontname F registerpattern F pushfloat F registerpostponedblock F pushhyphenation F registerreferencedobject F pushitaliccorrection F registerrendering F pushlist F registersection F registershownsynonym F pushpath F pushrandomseed F registerstructureprocessor F pushreferenceprefix F registersynonym F pushreaime F registerunit F pushsectionblock F registerusedsynonym F pushstream F registeruserdata F putboxincache F relatemarking F putincolumnset F renderingvar F rawcharacter F replacefeature F rawcountervalue F replacepospxywhd F rawdate F reportstructure F resavefloat F rawsetupstring F rawsubcountervalue F resetboxesincache F referencepagedetail F resetcharacteralign F referencepagestate F resetcolumnset F referencerealpage F resetcounter F registerattachment F reseteffect F registerbackendsymbol F resetfeature F registerbodyfontsize F resetfontfeature F resetfontsolution F registerbookmark F registerbuttons F resetinjector F resetitaliccorrection F registercolorintent F registercolumnsetarea F resetmapfiles F registeredviewerlayer F resetmarking F registerfigurepattern F resetmathattributes F registerfiguresuffix F resetmathitalics F registerfontalternative F resetnullfont F registerfontfamily F resetparallel F registerhelp F resetpath F registerhyphenationexception F resetprevdepth F registerhyphenationpattern F resetreference F registeritemgroup F resetscript F registerlanguagefeatures F resetshownsynonyms F registerlinenumbering F resetstructureprocessor F registermaintextcolor F resetsubcounter F registermpyfile F resettimer

F resettrackers

F registernamedlua

F resetusedsynonyms F setcolormodel F restartcounter F setcolumnsetarea F restartsubcounter F setcolumnsetlines F restorecounter F setcolumnsetproperties F restorecurrentattributes F setcolumnsetstart F restorenote F setcounter F restoreobject F setdataset E setdestinationattribute F reuserandomseed F revivefeature F setdigitsmanipulation F romannumerals F setdirection F rounded F setdocumentargument F runbuffer F setdocumentcommandline F runcontextiob F setdocumentctxfile F safechar F setdocumentdefaultargument F savebuffer F setdocumentenvironments F savecounter F setdocumentfilename F savecurrentattributes F setdocumentfilenames F savedlistnumber F setdocumentmodes F savedlistprefixednumber F setdocumentmodules F savedlisttitle F seteffect F savefloat F setelementuserproperties F savefont F setfieldcalculationset F setfigurelookuporder F savemargindata F setfigurepaths F savenote F savepagedata F setfirstline F savepageinjections F setfontfeature F setfontofid F saveparallel F savespecificfloat F setfontsolution F savestructureblock F setformat F savetaggedtwopassdata F setformsmethod F savetwopassdata F sethsizecolumnset F savevariable F sethsizecolumnspan F second F sethyphenatedurlcharacters F selectstructureblock F sethyphenationfeatures F setactivecatcodes F sethyphenationmethod F setbreakpoints F setinitial F setcharacteralign F setinitialsectionblock F setcharactercasing F setinjector F setinnerreferencemethod F setcharactercleaning F setcharacterkerning F setinsertionlocation F setinterfaceconstant F setcharacterspacing F setcharacterstripping F setinterfaceelement F setclosedocumentaction F setinterfacemessage

F setinterfacemessages

F setclosepageaction

E setinterfacevariable F setscript F setinternalreference F setsectionblock F setitaliccorrection F setsectionentry F setjavascriptpreamble F setstructureblockstate F setjobcomment F setstructurelevel F setlanguageexceptions F setstructurenumber F setlanguagesynonym F setsubcounter F setlettercatcodes F settagaspect F setmanfile F settagcombination F setmapline F settagdelimitedsymbol F setmarking F settagfigure F settaggedmetadata F setmathalphabet F setmathalternate F settaghighlight F setmathattribute F settagitem F setmathdirection F settagitemgroup F setmathdomain F settaglist F setmathitalics F settagnotation F setmathstyle F settagnotationsymbol F setmpextensions F settagproperty F setnaturalwd F settagproperty b F setnegative F settagproperty n F setnextinternalreference F settagregister F setnextreferenceorder F settagsorting F setnotestate F settagsubsentencesymbol F setopendocumentaction F settagsynonym F setopenpageaction F settagtablecell F setowncounter F settagtabulatecell F setownsubcounter F setupbookmarks F setpagecolormodel F setupcanvas F setpagestate F setupcharacterspacing F setpagestaterealpageno F setupexport F setpagetransition F setupfontexpansion F setparbuilder F setupfontprotrusion F setpdfcompression F setupidentity F setprofile F setupinsertion F setrandomseed F setupitaliccorrection F setrealign F setuplinenumbering F setrealspaces F setuserinterface F setvalidinterfacekeys F setreferencearguments F setreferenceoperation F setvisual F setregionbox F setvisualfont F setregionboxtagged F setvisuallayer F setvisuals F setregistermethod

F setvsizecolumnset

F setreplacements

F setxmpfile F stopenvironment F showassignerror F stopfontsolution F showattributes F stopparbuilder F showcounter F stopproduct F showdebuginfo F stopproject F showdirectives F stopregime F showdiscretionaries F stopsectionlevel F showexperiments F stopstream F showhyphenatedinlist F stoptag F showhyphenationtrace F stoptext F showinjector F stopviewerlayer F showjustification F storejavascriptcode F showlogcategories F storejavascriptpreamble F showmessage F storenote F showtrackers F storeregister F sin F strdp F sind F strhd F splitfilename F strht F spotcolorname F strip F spotcolorparent F structureautocatcodedget F spotcolorvalue F structurecatcodedget F startactualtext F structuregivencatcodedget F startchemical F structurenumber F startcolorset F structuretitle F startcomponent E structureuservariable F startenvironment F structurevariable F startfontsolution F strwd F startparbuilder F subcountervalue F startproduct F subcountervalues F startproject F subsubcountervalues F startregime F subtractfeature F startsectionlevel F synccolor F startstream F synccolorclone F starttag F synccolorcount F starttag\_c F synchronizemarking F starttag d F synchronizestream F starttag\_u F synonymmeaning F starttext F synonymname F systemlog F startviewerlayer F step F tagmfunctionlab F stopactualtext F tagmfunctiontxt F stopchemical F tan F stopcolorset F tand F stopcomponent F texdefinition one

F texdefinition two F usetexfileonce F textime F useurl F thefirstcharacter F usexmlfile F usexmlfileonce F themaxboxwidth F theremainingcharacters F usezipfile F tochar F utfchar F transparencycomponents F utfmathclass F utfmathcommand F triggerpagebuilder F truefilename F utfmathcommandahove F utfmathcommandhelow F type F typebuffer F utfmathcommandfiller F utfmathfiller F typefile F uchar F utfmathstretch F uchexnumber F vboxlisttohbox F uchexnumbers F verbose F undefinechemical F vspacing F unicodechar F vspacingcollapse F unihex F vspacingcollapseonly F unit normal F vspacingdefine F unit reverse F vspacingsetamount F unloadlanguage F vspacingsnap F upper F wav F useMPlibrary F weekday F useanyfile F weekdayname F useanvfileonce F writestatus F usecldfile F x table c F usecldfileonce F x\_table\_cleanup F x\_table\_construct F usecolors F x\_table\_create F usecomponent F useenvironment F x\_table\_finish\_row F usefigurebase F x\_table\_flush F usefile F x table init construct F usejavascriptpreamble F x table init reflow height F usejavascriptscripts F x\_table\_init\_reflow\_height\_option F useluafile F x\_table\_init\_reflow\_width F useluafileonce F x\_table\_init\_reflow\_width\_option F useluamodule F x\_table\_next\_row F x\_table\_next\_row\_option F usemodules F usepath F x table r F useproduct F x\_table\_reflow\_height F useproject F x\_table\_reflow\_width F usesubpath F x\_table\_set\_construct F usesymbols F x table set reflow height F usetexfile F x\_table\_set\_reflow\_width

F xmladdindex F xmlflushpure F xmlaftersetup F xmlflushsetups F xmlall F xmlflushspacewise F xmlappendsetup F xmlflushtext F xmlapplyselectors F xmlfunction F xmlatt F xmlgetindex F xmlattdef F xmlinclude F xmlattribute F xmlincludeontions F xmlattributedef F xmlinclusion F xmlbadinclusions F xmlinclusions F xmlindex F xmlbeforesetup F xmlinlineverbatim F xmlchainatt F xmlchainattdef F xmlinstalldirective F xmlchecknamespace F xmllast F xmlcommand F xmllastatt F xmlconcat F xmllastmatch F xmlconcatrange F xmlload F xmlloadbuffer F xmlcontext F xmlloaddata F xmlcount F xmldelete F xmlloaddirectives F xmldirect F xmlloadentities F xmldirectives F xmlmain F xmldirectivesafter F xmlmatch F xmldirectivesbefore F xmlname F xmldisplayverbatim F xmlnamespace F xmldoif F xmlnonspace F xmldoifelse F xmlpath F xmldoifelseempty F xmlpos F xmldoifelseselfempty F xmlprependsetup F xmldoifelsetext F xmlpure F xmldoifempty F xmlraw F xmldoifnot F xmlrawtex F xmldoifnotempty F xmlrefatt F xmldoifnotselfempty F xmlregisterns F xmldoifnottext F xmlremapname F xmldoifselfempty F xmlremapnamespace F xmldoiftext F xmlremovesetup F xmlelement F xmlresetinjectors F xmlfilter F xmlresetsetups F xmlfilterlist F xmlsave F xmlfirst F xmlsetcommandtonone F xmlflush F xmlsetcommandtotext

F xmlflushlinewise F xmlsetinjectors

F xmlflushcontext

F xmlsetentity

F xmlsetsetup F xmlsnippet F xmlstartraw F xmlstarttiming F xmlstopraw F xmlstoptiming F xmlstrip F xmlstripanvwhere F xmlstripnolines F xmlstripped F xmlstrippednolines F xmltaq F xmltexentity F xmltext F xmltobuffer F xmltobufferverbose F xmltofile F xmltoparameters F xmlverbatim F xmlwithindex

function setcount setdimen function setelement function setformat function setmacro function setmessage function function setmessages function settranslation setupstrings data table setuserinterface function setvalidkevs function setvariable function function showmessage storedscanners data table strings table syntax data table tolist function translations data table usednamespaces data table variables data table writestatus function

setconstant function

F vear

#### io (basic lua)

ask function
bytes function
characters function
close function
exists function
fileseparator string
flush function

loadchunk function
loaddata function
loadlines function
noflines function

open overloaded function
output overloaded function

pathseparator string

function read readall function readnumber function readstring function savedata function size function stderr userdata stdin userdata stdout userdata tmpfile function function type write function

#### jit (context)

arch string
attach function
flush function
off function
on function
opt table

F start

os string
status function
version string
version\_num number

# job (context)

comment	function	F	find	
datasets	table		first	
D collected			get	
F extend			getcollected	
F getdata			getdata	
F setdata			getfield	
D tobesaved			gettobesaved	
disablesave	function	F	inlist	
fileobjreferences	table	F	last	
D collected		F	list	
D tobesaved		F	save	
files	table	F	savetagged	
D collected		D	tobesaved	
F context		posi	tions	table
B forcerun		F	b_column	
F run		F	b_region	
D tobesaved		F	С	
initialize	function	D	collected	
load	function	F	column	
loadother	function	F	сору	
objects	table	F	depth	
D collected		F	e_column	
F get		F	e_region	
F number		F	enhance	
F page		F	extra	
F save		F	get	
F set		F	getreserved	
D tobesaved		F	gettobesaved	
pack	boolean	F	hangafter	
packversion	number	F	hangindent	
pagestates	table	F	height	
D collected		F	hsize	
F extend		F	leftskip	
F realpage		F	lowerleft	
F setstate		F	lowerright	
D tobesaved		F	markregionbox	
passes	table		n	
F check			onsamepage	
D collected			overlapping	
F count		F	p	
F define		F	page	

F paragraph	save	function
F parindent	structure	table
F position	D collected	
Fr	T components	
F region	T tobesaved	
F replace	T branches	
F rightskip	S name	
F set	S type	
F setall	variables	table
F setregionbox	D checksums	
D tobesaved	D collected	
F upperleft	F getchecksum	
F upperright	F makechecksum	
S used	F restore	
F width	F save	
F x	F setchecksum	
F xy	D tobesaved	
F y	version	number

## lang (basic tex)

clean	function	id	function
clear_hyphenation	function	new	function
clear_patterns	function	patterns	function
exceptions	function	postexhyphenchar	function
gethjcode	function	posthyphenchar	function
hyphenate	function	preexhyphenchar	function
hyphenation	function	prehyphenchar	function
hyphenationmin	function	sethjcode	function

## languages (context)

	£		
associate	function	F registerexception	
associated	data table	F registerpattern	
association	function	F setfeatures	£
counters	data table	installed	function
current	function	labels	table
data	data table	F define	
decimals	data table	F split	
define	function	loadable	function
expand	function	loadwords	function
expanders	table	logger	table
frequencies	table	F report	
F averagecharwidth		numbers	data table
F getdata		postexhyphenchar	function
getdata	function	posthyphenchar 	function
getnumber	function	preexhyphenchar	function
hjcounts	table	prehyphenchar	function
hyphenate	function	registered	data table
hyphenators	table	replacements	table
T dictionaries		F add	
D featuresets		F handler	
F handler		F set	
T methods		serializediscretionary 	function
F expanded		setexceptions	function
B none		setsynonym	function
F original		showdiscretionaries	function
F tex		unload -	function
F traditional		urls	table
B optimize		D characters	
F popmethod		N lefthyphenmin	
F pushmethod		D mapping	
F setmethod		B packslashes	
F setup		N righthyphenmin	
F showhyphenationtrace		F setcharacters	
T traditional		version	number
F definefeatures		visualizediscretionaries	function
F gettrace		words	table
F hyphenate		F check	
F injecthyphens		T data	
F installmethod		F disable	
F lasttrace		F enable	
F loadpatterns		T enablers	

B enables

F found

F load

T methods

N threshold

#### layouts (context)

status table
 F isleftpage

F leftorrightpageaction

## lfs (extra lua)

attributes	overloaded	function
chdir	overloaded	function
currentdir	function	
dir	overloaded	function
isdir	overloaded	function
isfile	overloaded	function
lock	function	
lock_dir	overloaded	function
mkdir	overloaded	function

mkdirs	function	
readlink	overloaded	function
rmdir	overloaded	function
setmode	overloaded	function
shortname	overloaded	function
symlinkattributes	overloaded	function
touch	overloaded	function
unlock	function	

#### libraries (context)

basiclua	data table
basictex	data table
builtin	data table
extralua	data table

extratex data table
functions data table
globals data table

#### lmx (context)

color	function		
convert	function		
convertfile	function		
convertstring	function		
einject	function		
eprint	function		
escape	function		
finalized	function		
finject	function		
fprint	function		
get	function		
getvariables	function		
htmfile	function		
html	table		
Fa			
F td			
F th			
include	function		
inherited	table		
S color-background-four			
S color-background-one			
S color-background-three			

S color-background-two

function

function

function

S title

initialize

inject

**lmxfile** 

loadedfile function function make new function overloaderror function popupfile function function print pν function function report reset function result function set function show function showdebuginfo function showerror function stripcss function function tν function type function urlescape variable function variables table

- S color-background-blue
- S color-background-body
- S color-background-green
- S color-background-main
- S color-background-purple
- S color-background-yellow
- S title-default

## logs (context)

application	function	reportlines	function
categories	function	setformats	function
direct	function	setformatters	function
disable	function	setlogfile	function
enable	function	setmessenger	function
exporters	table	setprocessor	function
extendbanner	function	setprogram	function
flush	function	settarget	function
help	function	settimedlog	function
messenger	function	settranslations	function
new	function	show	function
newline	function	show_close	function
poptarget	function	show_load	function
pushtarget	function	show_open	function
report	function	simple	function
reportbanner	function	simpleline	function
reporter	function	simplelines	function
reporters	table	start_page_number	function
F banner		status	function
F export		stop_page_number	function
F help		subdirect	function
F info		subreport	function
F lines		system	function
F version		texerrormessage	function
reportline	function	writer	function

## lpdf (context)

action	function	finalizedocument	function
adddocumentcolorspace	function	finalizepage	function
adddocumentextgstate	function	finishtransparencycode	function
adddocumentpattern	function	flushobject	function
adddocumentshade	function	flushstreamfileobject	function
addtocatalog	function	flushstreamobject	function
addtoinfo	function	formats	data table
addtonames	function	frompdfdoc	function
addtopageattributes	function	fromsixteen	function
addtopageresources	function	gethpos	function
addtopagesattributes	function	getmatrix	function
addxmpinfo	function	getpos	function
annotationspecification	function	getvpos	function
array	function	graycode	function
boolean	function	hasmatrix	function
border	function	id	function
checkedkey	function	injectxmpinfo	function
checkedvalue	function	insertxmpinfo	function
circularshade	function	layerreference	function
cmykcode	function	limited	function
collectedresources	function	linearshade	function
color	function	nametree	function
colorspace	function	null	function
colorspaceconstants	data table	number	function
colorspec	function	pagereference	function
colorvalue	function	patternstream	function
colorvalues	function	pdfcolor	function
constant	function	pdftimestamp	function
delayedobject	function	permitdetail	function
destinationspecification	function	protectresources	boolean
dictionary	function	rectangle	function
docstring	function	reference	function
epdf	table	registerannotation	function
F contenttotext		registerdestination	function
F expand		registerdocumentfinalizer	function
F expanded		registerpagefinalizer	function
F getpagecontent		registerpattern	function
F getstructure		reserveobject	function
F load		rgbcode	function
F unload		rotationcm	function
escaped	function	setdates	function

settime	function	tosixteen	function
settrailerid	function	transform	function
shareobject	function	transparency	function
shareobjectreference	function	transparencycode	function
spotcode	function	transparencygroups	table
stream	function	B none	
string	function	transparencyvalue	function
timestamp	function	unicode	function
toeight	function	verbose	function
topdfdoc	function		

## lpeg (basic lua)

В	function	finder	function
C	function	firstofsplit	function
Carg	function	frontstripper	function
Cb	function	instringchecker	function
Cc	function	is_lpeg	function
Cf	function	keeper	function
Cg	function	locale	function
Cmt	function	match	function
Ср	function	oneof	function
Cs	function	patterns	data table
Ct	function	pcode	function
P	function	print	function
R	function	ptree	function
S	function	replacer	function
UP	function	secondofsplit	function
UR	function	setmaxstack	function
US	function	split	function
V	function	splitat	function
afterprefix	function	splitter	function
anywhere	function	stripper	function
append	function	times	function
balancer	function	tsplitat	function
beforesuffix	function	tsplitter	function
checkedsplit	function	type	function
counter	function	utfchartabletopattern	function
endstripper	function	version	function

## ltn12 (extra lua)

BLOCKSIZE	number	Fsi	mplify
filter	table	F ta	ble
F chain		source	table
F cycle		F ca	t
pump	table	F ch	ain
F all		F em	pty
F step		F er	ror
sink	table	F fi	le
F chain		F re	wind
F error		F si	mplify
F file		F st	ring
F null			

# lua (basic tex)

bytecode table 1	lastbytecode	number
bytedata data table n	mask	string
bytedone table n	messages	data table
B page-cst r	name	table
collectgarbage function r	numbers	data table
delay function	registercode	function
finalize function	registeredcodes	function
firstbytecode number r	registerfinalizer	function
flush function r	registername	function
flushdelayed function s	setbytecode	function
<pre>get_functions_table function</pre>	setluaname	function
getbytecode function s	startupfile	string
getluaname function	version	string

### luatex (context)

cleanuptempfiles function
registerdumpactions function
registerpageactions function
registerstartactions function

registerstopactions registertempfile starttime function function number

# lxml (context)

		<b>63</b> . I	
addindex	function	flush	function
all	function	flushlinewise	function
applyfunction	function	flushsetups	function
applyselectors	function	flushspacewise	function
att	function	get_id	function
attribute	function	getid	function
badinclusions	function	getindex	function
chainattribute	function	id	function
checkindex	function	idsplitter	userdata
collected	function	include	function
command	function	inclusion	function
concat	function	inclusions	function
concatrange	function	index	function
content	function	inlineverbatim	function
context	function	installsetup	function
convert	function	last	function
count	function	lastatt	function
delete	function	lastmatch	function
direct	function	load	function
directives	table	loadbuffer	function
F after		loaddata	function
F before		loaded	table
F handle		main	function
F load		match	function
F setup		name	function
displayverbatim	function	namespace	function
doif	function	nonspace	function
doifelse	function	path	function
doifelseempty	function	pos	function
doifelsetext	function	position	function
doifempty	function	pure	function
doifnot	function	raw	function
doifnotempty	function	rawroot	function
doifnottext	function	rawtex	function
doiftext	function	refatt	function
element	function	register	function
elements	function	registerentity	function
entities	data table	removesetup	function
filter	function	resetcdata	function
filterlist	function	resetsetups	function
first	function	resolvedentity	function

root	function	startraw	function
save	function	startunescaped	function
serialize	function	stopraw	function
setaction	function	stopunescaped	function
setcdata	function	store	function
setcommandtonone	function	strip	function
setcommandtotext	function	stripped	function
setsetup	function	tag	function
snippet	function	text	function
sorters	table	tobuffer	function
F add		tofile	function
F compare		toparameters	function
F flush		toverbatim	function
F reset		verbatim	function
F show		withindex	function
F sort		xmltexhandler	data table
splitid	function		

## math (basic lua)

abs	function
acos	function
asin	function
atan	function
atan2	function
ceil	function
ceiling	function
cos	function
cosd	function
cosh	function
deg	function
div	function
even	function
exp	function
floor	function
fmod	function
frexp	function
huge	number
initialseed	number
ldexp	function
log	function

log10	function
max	function
min	function
mod	function
modf	function
odd	function
pi	number
pow	function
rad	function
random	function
randomseed	function
round	function
setrandomseedi	function
sin	function
sind	function
sinh	function
sqrt	function
tan	function
tand	function
tanh	function

## mathematics (context)

addfallbacks	function	injectfallbacks	function
alphabets	data table	makefont	function
alternatives	data table	mapremap	data table
big	function	overloaddimensions	function
boldmap	data table	overloadparameters	function
categories	table	privatebase	number
D functions		registerdomain	function
charactersets	data table	remapalphabets	function
checkaccentbaseheight	function	renderings	table
checkprivateparameters	function	D mappings	
classes	data table	D numbers	
codes	data table	D sets	
define	function	renderset	function
dimensions	function	resetattributes	function
domains	table	resetitalics	function
extensiblecode	function	scaleparameters	function
extensibles	data table	setdomain	function
extrabase	number	setitalics	function
extras	table	sets	data table
F add		styles	data table
F copy		syncboth	function
fallbacks	table	syncname	function
F apply		syncstyle	function
F install		toname	function
fallbackstyleattr	function	tostyle	function
families	data table	tweakaftercopyingfont	function
gaps	data table	tweakbeforecopyingfont	function
getboth	function	tweaks	table
getdomain	function	utfmathaccent	function
getitalics	function	utfmathclass	function
getstyle	function	utfmathcommand	function
horizontalcode	function	utfmathfiller	function
initializeparameters	function	utfmathstretch	function

## mbox (context)

parse	function	parse_message	function
parse_from	function	split_headers	function
parse_header	function	split_mbox	function
parse_headers	function	split_message	function

# md5 (extra lua)

HEX	function	exor	function
crypt	function	hex	function
dec	function	sum	function
decrypt	function	sumhexa	function

# metapost (context)

analyzeplugins	function	getstatistics	function
checkformat	function	gettext	function
checktexts	function	graphic	function
collapse	boolean	graphic_base_pass	function
colorinitializer	function	initializescriptrunner	function
comment	function	instance	function
convert	function	intermediate	table
defaultformat	string	T actions	
defaultinstance	string	F makempy	
defaultmethod	string	lastlog	string
directrun	function	load	function
escaped	function	makempy	table
exectime	table	N nofconverted	
extensiondata	data table	F processgraphics	
filterclippath	function	F registerfile	
flush	function	maketext	function
flushers	table	metafun	table
T pdf		F interpolate	
F comment		F topath	
F flushfigure		method	number
F startfigure		mptopdf	table
F stopfigure		F convertmpstopdf	
F textfigure		N nofconverted	
flushliteral	function	n	number
flushnormalpath	function	nvformat	function
flushreset	function	optimize	boolean
fonts	table	parse	function
F define		pdfliterals	function
T flusher		pluginactions	function
F flushfigure		process	function
F startfigure		processplugins	function
F stopfigure		processspecial	function
N instances		properties	table
F process		quickanddirty	function
format	function	reducetogray	boolean
format_number	function	reporterror	function
format_string	function	reset	function
formatnumber	function	resetlastlog	function
getclippath	function	resetplugins	function
getextensions	function	runscript	function
getjobdata	function	scripterror	function

setextensions	function	F set	
setoutercolor	function	F setfrombuffer	
settext	function	texerrors boolean	
showlog	boolean	textextsdata	function
simple	function	theclippath	function
svformat	function	totable	function
tex	table	unload	function
F get		untagvariable	function
F reset		variables	table

### mime (extra lua)

b64 decode	function function	qp qpwrp	function function
decodet	table	stuff	function
F base64		unb64	function
F quoted-	printable	unqp	function
dot	function	wrap	function
encode	function	wrapt	table
encodet	table	F base64	
F base64		F defaul	t
F quoted-	printable	F quoted	-printable
eol	function	F text	
normalize	function	wrp	function

## mp (context)

BackSpace	function	OuterMarginWidth	function
BaseLineSkip	function	OverlayDepth	function
BodyFontSize	function	<b>OverlayHeight</b>	function
BottomDistance	function	<b>OverlayLineWidth</b>	function
BottomHeight	function	<b>OverlayOffset</b>	function
BottomSpace	function	<b>OverlayWidth</b>	function
CurrentColumn	function	PageDepth	function
CurrentHeight	function	PageFraction	function
CurrentWidth	function	PageNumber	function
CutSpace	function	PageOffset	function
EmWidth	function	PaperBleed	function
ExHeight	function	PaperHeight	function
FooterDistance	function	PaperWidth	function
FooterHeight	function	PrintPaperHeight	function
HSize	function	PrintPaperWidth	function
HeaderDistance	function	RealPageNumber	function
HeaderHeight	function	RightEdgeDistance	function
InPageBody	function	RightEdgeWidth	function
InnerEdgeDistance	function	RightMarginDistance	function
InnerEdgeWidth	function	RightMarginWidth	function
InnerMarginDistance	function	SpineWidth	function
InnerMarginWidth	function	StrutDepth	function
LastPageNumber	function	StrutHeight	function
LayoutColumnDistance	function	TextHeight	function
LayoutColumnWidth	function	TextWidth	function
LayoutColumns	function	TopDistance	function
LeftEdgeDistance	function	TopHeight	function
LeftEdgeWidth	function	TopSkip	function
LeftMarginDistance	function	TopSpace	function
LeftMarginWidth	function	VSize	function
LineHeight	function	_f_	function
MakeupHeight	function	boolean	function
MakeupWidth	function	dataset	function
NOfColumns	function	datasets	table
NOfPages	function	Fload	
NamedColor	function	defaultcolormodel	function
OnOddPage	function	format	function
OnRightPage	function	formatted	function
OuterEdgeDistance	function	get	table
OuterEdgeWidth	function	F boolean	
OuterMarginDistance	function	F number	

F numeric		quadruple	function
F string		quoted	function
<pre>get_outline_text</pre>	function	report	function
graphformat	function	size	function
n	function	tb_dimensions	function
numeric	function	triplet	function
pair	function	tt_dimensions	function
path	function	tt_initialize	function
print	function	_	

### mplib (extra tex)

fields function
finder function
finders table

F file

get\_boolean function
get number function

get\_numeric function
get\_string function

**new** overloaded function

pen\_info function
preprocessed function
version function

## noads (context)

handlers	table	F unscript		
F alternates		F variants		
F autofences		process	function	
F classes		<pre>processnested functi</pre>		
F collapse		processors	table	
F domains		T autofences		
F families		T collapse		
F italics		F mlist_to_hlist		
F relocate		T relocate		
F render		T render		
F resize		T resize		
F showtree		T unscript		
F tags		processouter	function	

#### node (basic tex)

F has\_field

check discretionaries function F has glyph check discretionary function F hpack copy function F insert after copy list function F insert before function count F is char function current attr F is direct dimensions function F is\_glyph direct table F is node F check discretionaries F is zero glue F check discretionary F kerning F copy F last node F copy list F lenath F ligaturing F count F current attr F new F dimensions F protect glyph F protect\_glyphs F effective glue F end\_of\_math F protrusion\_skippable F find attribute F remove F set attribute F first glyph F flush list F set\_properties\_mode F flush node F setboth F flush properties table F sethox F setchar F free F get attribute F setdisc F get properties table F setfield F getboth F setalue F setleader F getbox F setlink F getchar F aetdisc F setlist F aetfield F setnext F getfont F setprev F getglue F setproperty F getid F setsubtype F getleader F slide F getlist F tail F getnext F todirect F getprev F tonode F getproperty F tostring F getsubtype F traverse F has attribute F traverse char

F traverse\_id

F unprotect_glyphs		is_node	function
F unset_attribute		is_zero_glue	function
F usedlist		kerning	function
F vpack		last_node	function
F write		length	function
effective_glue	function	ligaturing	function
end_of_math	function	mlist_to_hlist	function
family_font	function	new	function
fields	function	next	function
find_attribute	function	prev	function
first_glyph	function	protect_glyph	function
flush_list	function	protect_glyphs	function
flush_node	function	protrusion_skippable	function
flush_properties_table	function	remove	function
free	function	set_attribute	function
get_attribute	function	set_properties_mode	function
get_properties_table	function	setboth	function
getboth	function	setfield	function
getchar	function	setglue	function
getdisc	function	setlink	function
getfield	function	setnext	function
getfont	function	setprev	function
getglue	function	setproperty	function
getid	function	slide	function
getleader	function	subtype	function
getlist	function	subtypes	function
getnext	function	tail	function
getprev	function	tostring	function
getproperty	function	traverse	function
getsubtype	function	traverse_char	function
has_attribute	function	traverse_id	function
has_field	function	type	function
has_glyph	function	types	function
hpack	function	unprotect_glyphs	function
id	function	unset_attribute	function
insert_after	function	usedlist	function
insert_before	function	vpack	function
is_char	function	whatsits	function
is_glyph	function	write	function

#### nodes (context)

_		
accentcodes	data table	firstcharacter
aligned	function	firstcharinbox
append 	function	firstdirinbox
astable	function	firstglyph
basepoints	function	flush
boundarycodes	data table	flush_list
boxes	table	flush_node
F dimensions		free
F direct		fullhpack
F reset		getbox
F restore		getchar
F save		getdisc
builders	table	getfield
F buildpage_filter		getfont
F vpack_filter		getglue
<pre>check_discretionaries</pre>	function	getid
codes	data table	getleader
concat	function	getlist
сору	function	getnext
copy_list	function	getprev
copy_node	function	getskip
count	function	getsubtype
current_attr	function	gluecodes
delete	function	glyphcodes
destinations	table	glyphdir_is_equal
N attribute		glyphdir_is_opposite
T done		glyphdir_is_orthogonal
F handler		handlers
T stack		F accessibility
dimensionfields	data table	F alignbackgrounds
dimensions	function	F backgrounds
dir_is_pop	data table	F characters
dir_negation	data table	F checkforleaks
disccodes	data table	F checkglyphs
discretionarycodes	data table	F cleanupbox
effective_glue	function	F cleanuppage
end_of_math	function	F export
fencecodes	data table	F finalize
fields	function	F migrate
fillcodes	data table	F protectglyphs
first_glyph	function	F stripping

function data table data table data table data table data table table

F unprotectglyphs		leftmarginwidth	function
has_attribute	function	ligaturing	function
has_field	function	linefillers	table
has_glyph	function	D data	
hpack	function	F define	
idstostring	function	F enable	
ignorablefields	data table	F handler	
injections	table	lines	table
F copy		T boxed	
F getligaindex		F register	
F getthreshold		F setup	
F handler		F stage_one	
F installnewkern		F stage_two	
F isspace		D data	
F keepcounts		F finalize	
F reset		F number	
F resetcounts		N scratchbox	
F setcursive		link	function
F setkern		linked	function
F setligaindex		list	function
F setmark		listablefields	data table
F setpair		listcodes	data table
F setspacekerns		listtoutf	function
insert_after	function	load	function
insert_before	function	locate	function
insert_list_after	function	margincodes	data table
installattributehandler	function	marginkerncodes	data table
is_char	function	markers	table
is_direct	function	F get	
is_display_math	function	mathcodes	data table
is_glyph	function	maxboxwidth	function
is_mirrored	data table	mlist_to_hlist	function
is_node	function	new	function
is_nut	function	noadcodes	data table
is_rotated	data table	nodecodes	data table
is_zero_glue	function	nopts	function
ischar	function	nuts	table
isglyph	function	F append	
kerncodes	data table	F check_discretionaries	
kerning	function	F concat	
keys	table	F copy	
T whatsit		F copy_list	
last_node	function	F copy_node	
leadercodes	data table	F copy_properties	

F copyvisual F is node F count F is nut F current attr F is\_zero\_glue F delete F ischar F dimensions F isqlyph F effective glue F kerning F end\_of\_math F last\_node F first glyph F leftmarginwidth F firstcharacter F ligaturing F firstcharinbox F link F firstglyph F linked F locate F flush F flush\_list F mlist\_to\_hlist F flush node F nestedtracedslide F free F fullhpack T pool F getattr F baselineskip F getattribute F boundary F getboth F cleanup F disc F getbox F getchar F emptyrule F getdisc F fontkern F getfield F glue F getfont F gluespec F getglue F glyph F getid F hlist F italickern F getleader F kern F getlist F latelua F getnext F getprev F lateluafunction F getprop F leftmarginkern F getskip F leftskip F getsubtype F lineskip F negatedglue F has\_attribute F has\_field F noad F has glyph F pdfannotation F pdfdestination F hpack F pdfdirect F insert\_after F insert\_before F pdfdirectliteral F insert\_list\_after F pdfliteral F is\_char F pdfpage F is\_direct F pdfpageliteral F is\_display\_math F pdfrestore F is\_glyph F pdfsave

F pdfsetmatrix F setchar F penalty F setdisc F register F setfield F rightmarginkern F setalue F rightskip F setleader F rule F setlink F shrink F setlist F special F setnext F stretch F setprev F temp F setprop F textdir F setsubtype F setunsetattributes F usage F userattributes F setvisual F setvisuals T userids N margins.inline F slide N property F somepenalty N splitters.one F somespace N splitters.two F splitbox F userlist F tail F userlua F takebox F usernumber F takelist F userrule F theprop F userstring F tonode F usertokens F tonodes F vlist F tonut F wordboundary F tosequence F zeroglue F tostring F prepend F tracedslide F protect glyph F traverse F protect\_glyphs F traverse\_char F protrusion\_skippable F traverse\_id F rawprop T typesetters F reference F tohbox F rehpack F tohpack F tonodes F remove F repackhlist F tovbox F tovpack F replace F rightmarginwidth F unprotect\_glyphs F set attribute F unset attribute F setattr F unsetattribute F setattribute F unsetattributes F setattributes F untracedslide F usedlist F setboth

F vianodes

F setbox

F vianuts		prepend	function
F vpack		print	function
F write		processors	table
packlist	function	B enabled	
pardir_is_equal	data table	F hpack_filter	
pardir_is_opposite	data table	F post_linebreak_filter	
pardir_is_parallel	data table	F pre_linebreak_filter	
partextdir_is_equal	data table	F tracer	
penaltycodes	data table	processwords	function
plugindata	table	properties	table
F finalizer		T actions	
F initializer		F delayed	
S name		F fdelayed	
T namespace		F immediate	
N attribute		F attach	
D data		T data	
F enable		F delayed	
F handler		protect_glyph	function
F register		protect_glyphs	function
D registered		protrusion_skippable	function
D values		pts	function
F processor		radicalcodes	data table
points	function	reference	function
points pool	function table	reference references	function table
•			
pool		references	
<pre>pool    F baselineskip</pre>		references N attribute	
<pre>pool  F baselineskip  F cleanup  F glyph  F hlist</pre>		references N attribute T done F handler T stack	table
<pre>pool  F baselineskip  F cleanup  F glyph  F hlist  F kern</pre>		references N attribute T done F handler T stack rehpack	table function
<pre>pool  F baselineskip  F cleanup  F glyph  F hlist  F kern  F latelua</pre>		references N attribute T done F handler T stack rehpack remove	table function function
<pre>pool  F baselineskip  F cleanup  F glyph  F hlist  F kern</pre>		references  N attribute T done F handler T stack rehpack remove repackhlist	function function function
F baselineskip F cleanup F glyph F hlist F kern F latelua F lateluafunction F lineskip		references  N attribute T done F handler T stack rehpack remove repackhlist replace	function function function function
F baselineskip F cleanup F glyph F hlist F kern F latelua F lateluafunction F lineskip F pdfdirect		references  N attribute  T done  F handler  T stack  rehpack  remove  repackhlist  replace  report	function function function function function
F baselineskip F cleanup F glyph F hlist F kern F latelua F lateluafunction F lineskip F pdfdirect F pdfliteral		references  N attribute  T done F handler T stack rehpack remove repackhlist replace report rightmarginwidth	function function function function function function
F baselineskip F cleanup F glyph F hlist F kern F latelua F lateluafunction F lineskip F pdfdirect F pdfliteral F pdfpageliteral		references  N attribute T done F handler T stack rehpack remove repackhlist replace report rightmarginwidth rulecodes	function function function function function function data table
F baselineskip F cleanup F glyph F hlist F kern F latelua F lateluafunction F lineskip F pdfdirect F pdfliteral F pdfpageliteral F pdfrestore		references  N attribute T done F handler T stack rehpack remove repackhlist replace report rightmarginwidth rulecodes rules	function function function function function function
F baselineskip F cleanup F glyph F hlist F kern F latelua F lateluafunction F lineskip F pdfdirect F pdfliteral F pdfrestore F pdfsave		references  N attribute T done F handler T stack rehpack remove repackhlist replace report rightmarginwidth rulecodes rules D data	function function function function function function data table
F baselineskip F cleanup F glyph F hlist F kern F latelua F lateluafunction F lineskip F pdfdirect F pdfliteral F pdfpageliteral F pdfrestore F pdfsave F pdfsave F pdfsetmatrix		references  N attribute T done F handler T stack rehpack remove repackhlist replace report rightmarginwidth rulecodes rules  D data F define	function function function function function function data table
F baselineskip F cleanup F glyph F hlist F kern F latelua F lateluafunction F lineskip F pdfdirect F pdfliteral F pdfpageliteral F pdfrestore F pdfsave F pdfsetmatrix F register		references  N attribute T done F handler T stack rehpack remove repackhlist replace report rightmarginwidth rulecodes rules  D data F define F enable	function function function function function function data table
F baselineskip F cleanup F glyph F hlist F kern F latelua F lateluafunction F lineskip F pdfdirect F pdfliteral F pdfpageliteral F pdfrestore F pdfsave F pdfsetmatrix F register F rule		references  N attribute T done F handler T stack rehpack remove repackhlist replace report rightmarginwidth rulecodes rules  D data F define F enable F handler	function function function function function function data table
F baselineskip F cleanup F glyph F hlist F kern F latelua F lateluafunction F lineskip F pdfdirect F pdfliteral F pdfpageliteral F pdfrestore F pdfsave F pdfsave F pdfsetmatrix F register F rule F special		references  N attribute T done F handler T stack rehpack remove repackhlist replace report rightmarginwidth rulecodes rules  D data F define F enable F handler T ruleactions	function function function function function function data table
F baselineskip F cleanup F glyph F hlist F kern F latelua F lateluafunction F lineskip F pdfdirect F pdfliteral F pdfpageliteral F pdfrestore F pdfsave F pdfsave F pdfsetmatrix F register F rule F special F usage		references  N attribute T done F handler T stack rehpack remove repackhlist replace report rightmarginwidth rulecodes rules  D data F define F enable F handler T ruleactions F draw	function function function function function function data table
F baselineskip F cleanup F glyph F hlist F kern F latelua F lateluafunction F lineskip F pdfdirect F pdfliteral F pdfpageliteral F pdfrestore F pdfsave F pdfsave F pdfsetmatrix F register F rule F special		references  N attribute T done F handler T stack rehpack remove repackhlist replace report rightmarginwidth rulecodes rules  D data F define F enable F handler T ruleactions	function function function function function function data table

F stroke		F enableaction	
F userrule		F enablegroup	
save	function	F freeze	
serialize	function	F freezegroup	
serializebox	function	F new	
set_attribute	function	F prependaction	
setattributes	function	F removeaction	
setbox	function	F replaceaction	
setboxtonaturalwd	function	F restart	
setfield	function	F setaction	
setglue	function	F showactions	
setunsetattributes	function	F table	
shifts	table	textdir_is_equal	data table
D data		textdir_is_is	data table
F define		textdir_is_opposite	data table
F enable		textdir_is_parallel	data table
F handler		tobasepoints	function
show	function	tocentimeters	function
showboxes	function	tociceros	function
showcodes	function	todidots	function
showlist	function	todimen	function
showsimplelist	function	toinches	function
skipcodes	data table	tomillimeters	function
slide	function	tonewciceros	function
snapshots	table	tonewdidots	function
F getparameters		tonode	function
F getsamples		tonodes	function
F resetsamples		tonut	function
F takesample		topicas	function
somepenalty	function	topoints	function
somespace	function	toscaledpoints	function
splitbox	function	tosequence	function
stripdiscretionaries	function	tostring	function
stripping	table	totable	function
T glyphs		totree	function
F set		toutf	function
striprange	function	tracers	table
tail	function	T characters	
takebox	function	F collect	
tasks	table	F equal	
F actions		F start	
F appendaction		F string	
F disableaction		F unicodes	
F disablegroup		T colors	

F reset		typesetters	table
F set		F hbox	
F setlist		F hpack	
F fontchar		F tohbox	
T frequencies		F tohpack	
F register		F tonodes	
T pool		F tovbox	
T nodes		F tovpack	
F rule		F vpack	
T nuts		unprotect_glyphs	function
F rule		unset_attribute	function
F resetproperties		unsetattribute	function
F rule		unsetattributes	function
F setlist		usedlist	function
F setproperties		usercodes	data table
F start		vianodes	function
T steppers		vianuts	function
F check		visualizebox	function
F codes		visualizers	table
F features		F box	
F font		F handler	
F glyphs		F markfonts	
F message		F setfont	
F messages		F setlayer	
F nofsteps		F setvisual	
F register		vpack	function
F reset		whatcodes	data table
F start		whatsitcodes	data table
F stop		whatsitters	table
F stop		T getters	
T transparencies		T dimensions	
F reset		T width	
F set		T setters	
F setlist		T dimensions	
traverse	function	T width	
traverse_char	function	write	function
traverse_id	function		

### number (context)

basepoints	function function	tocentimeters tociceros	function function
bit	function	tocontext	function
bits	function	todidots	function
clearbit	function	todimen	function
dimenfactors	data table	toevenhex	function
formatted	function	toinches	function
hasbit	function	tomillimeters	function
maxdimen	number	tonewciceros	function
nopts	function	tonewdidots	function
percent	function	tonumberf	function
points	function	tonumberg	function
pts	function	topicas	function
setbit	function	topoints	function
signed	function	toscaled	function
sparseexponent	function	toscaledpoints	function
splitdimen	function	toset	function
tobasepoints	function	valid	function
tobitstring	function		

# objects (context)

data	table	page	function
dimensions	function	reference	function
found	function	register	function
n	number	restore	function

## os (basic lua)

getenv	function	remove	overloaded function
setenv	function	rename	overloaded function
binsuffix	string	resolvers	table
binsuffixes	table	F bits	
clock	function	resultof	function
converttime	function	runtime	function
date	function	selfdir	string
difftime	function	setenv	overloaded function
env	data table	setlocale	overloaded function
exec	overloaded function	sleep	function
execute	overloaded function	spawn	overloaded function
exit	function	time	function
fulltime	function	times	function
getenv	overloaded function	timezone	function
gettimeofday	function	tmpdir	function
isleapyear	function	tmpname	function
launch	function	today	function
libsuffix	string	type	string
localtime	function	uname	function
name	string	uuid	function
newline	string	validdate	function
nofdays	function	weekday	function
now	function	where	function
platform	string	which	function

# package (basic lua)

config	string	loaded	table
cpath	string	loaders	table
extralibpath	function	loadlib	function
extralibpaths	function	luapaths	function
extraluapath	function	path	string
extraluapaths	function	preload	table
helpers	table	searchpath	function
libpaths	function	seeall	function

# pagebuilders (context)

1	4-bl-	_		
columnsets	table	F	sethsize	
F add		F	sethspan	
F block		F	setlines	
F check		F	setpropertie	S
F currentcolum	n	F	setstart	
F define		F	setvsize	
F finishflush		inje	ctions	table
F flushareas		F	flushafter	
F flushcolumn		F	flushbefore	
F flushrest		F	save	
F goto		mixe	dcolumns	table
F noto		F	cleanup	
F prepareflush	1	F	finalize	
F put		F	getlist	
F registerarea	ì	F	getrest	
F reset		F	getsplit	
F setarea		F	setsplit	

# pdf (basic tex)

fontname	function	immediateobj	function
fontobjnum	function	mapfile	function
fontsize	function	mapline	function
getcatalog	function	maxobjnum	function
getcompresslevel	function	newcolorstack	function
getcreationdate	function	obi	function
getdecimaldigits	function	objtype	function
getdestmargin	function	pageref	function
gethpos	function	print	function
getignoreunknownimages	function	refobj	function
getimageresolution	function	registerannot	overloaded function
getinclusionerrorlevel	function	reserveobj	function
getinfo	function	setcatalog	overloaded function
getlastannot	function	setcompresslevel	function
getlastlink	function	setdecimaldigits	function
getlastobj	function	setdestmargin	function
getlinkmargin	function	setfontattributes	function
getmajorversion	function	setignoreunknownimages	function
getmajorversion	function	setimageresolution	function
getminorversion	function	setinclusionerrorlevel	function
getnames	function	setinfo	overloaded function
getobjcompresslevel	function	setlinkmargin	function
getorigin	function	setmajorversion	function
getpageattributes	function	setminorversion	function
getpageresources	function	setnames	overloaded function
getpagesattributes	function	setobjcompresslevel	function
getpkresolution	function	setorigin	function
getpos	function	setpageattributes	overloaded function
getretval	function	setpageresources	overloaded function
getsuppressoptionalinfo		setpagesattributes	overloaded function
getthreadmargin	function	setpkresolution	function
gettrailer	function	setsuppressoptionalinfo	function
gettrailerid	function	setthreadmargin	function
getversion	function	settrailer	overloaded function
getvpos	function	settrailerid	function
getxformattributes	function	setxformattributes	function
getxformmargin	function	setxformmargin	function
getxformresources	function	setxformresources	function
hasmatrix	function	xformname	function

# pdfscanner (context)

scan function

# physics (context)

units table

F registerunit

D tables

### profiler (extra lua)

## publications (context)

addtexentry	function	S author
analyze	function	T categories
anywhere	function	T article
authorcache	data table	S category
authorcollapsers	data table	T extra
authorhashers	table	T fields
F invertedshort		S author
F normal		S editor
F normalinverted		S journal
F normalshort		S keywords
F short		S number
authormap	data table	S pages
authortoregister	function	S title
casters	table	S volume
F author		S year
F keyword		T optional
F pagenumber		T required
F range		T sets
checkeddataset	function	T author
citevariants	table	T virtual
F author		T book
F authornum		S category
F authoryear		T extra
F authoryears		T fields
F category		S address
F default		S author
F entry		S edition
F index		S editor
F keywords		S keywords
F num		S number
F page		S publisher
F short		S subtitle
F tag		S title
F textnum		S volume
F year		S year
collected	data table	T optional
components	table	T required
F author		T sets
concatstate	function	T author
converttoxml	function	T editionset
currentspecification	table	T virtual

T demo-a	T virtualfields	
S category	B authornum	
T extra	B authoryear	
T fields	B authoryears	
S author	B num	
S institution	B suffix	
S organization	datasets	table
S subtitle	detailed	table
S title	endnotes_to_btx	function
S year	enhancer	table
T optional	S arguments	
T required	T askip	
T sets	B dirty	
T author	T gskip	
T virtual	T kind	
T demo-b	T list	
S category	T system	
T extra	T order	
T fields	enhancers	table
S author	F details	
S institution	F order	
S organization	F suffixes	
S subtitle	finder	function
S title	firstofrange	function
S year	found	function
T optional	get	function
T required	getcasted	function
T sets	getdetail	function
T authors	getdirect	function
T virtual	getfaster	function
S comment	getfield	function
S copyright	getfuzzy	function
T fields	getindex	function
S name	inspectors	data table
T types	journals	table
S author	F abbreviated	
S editor	F add	
S keywords	F expanded	
S number	F load	
S page	F save	
S pages	lastofrange	function
S volume	lists	table
S version	F collectentries	
D virtual	F combiinlist	

F fetchentries		okay	function
F filterall		oneorrange	function
F flushcombi		parenttag	function
F flushentry		permitted	function
T methods		refman_to_btx	function
F dataset		resolvedname	function
F force		save	function
F global		search	function
F local		setcategory	function
F nofregistered		setspecification	function
F prepareentries		singularorplural	function
F register		sortedentries	function
F sameasprevious		sortmethods	table
T sorters		T authoryear	
F cite		T sequence	
F dataset		specifications	table
F default		T default	
F index		S author	
F list		S comment	
F reference		S copyright	
F short		S name	
F used		S version	
F uservariable		D virtual	
listvariants	table	splitauthor	function
F default		splitoneauthor	function
F index		statistics	table
1 Illuex		Statistics	cabcc
F num		N nofbytes	tubte
			caste
F num		N nofbytes	cabic
F num F page F short F tag		N nofbytes N nofdatasets N nofdefinitions N nofshortcuts	
F num F page F short F tag  load	function	N nofbytes N nofdatasets N nofdefinitions N nofshortcuts tables	table
F num F page F short F tag load loadbibdata	function	N nofbytes N nofdatasets N nofdefinitions N nofshortcuts	
F num F page F short F tag load loadbibdata loaddefinitionfile	function function	N nofbytes N nofdatasets N nofdefinitions N nofshortcuts tables D implicits D origins	
F num F page F short F tag load loadbibdata loaddefinitionfile loaders	function	N nofbytes N nofdatasets N nofdefinitions N nofshortcuts tables D implicits	
F num F page F short F tag load loadbibdata loaddefinitionfile loaders F bbl	function function	N nofbytes N nofdatasets N nofdefinitions N nofshortcuts tables D implicits D origins	
F num F page F short F tag load loadbibdata loaddefinitionfile loaders	function function	N nofbytes N nofdatasets N nofdefinitions N nofshortcuts tables D implicits D origins D privates	
F num F page F short F tag load loadbibdata loaddefinitionfile loaders F bbl	function function	N nofbytes N nofdatasets N nofdefinitions N nofshortcuts tables D implicits D origins D privates D sets	
F num F page F short F tag load loadbibdata loaddefinitionfile loaders F bbl F bib	function function	N nofbytes N nofdatasets N nofdefinitions N nofshortcuts tables D implicits D origins D privates D sets D specials	table
F num F page F short F tag load loadbibdata loaddefinitionfile loaders F bbl F bib F buffer F endnote F lua	function function	N nofbytes N nofdatasets N nofdefinitions N nofshortcuts tables D implicits D origins D privates D sets D specials D types D virtuals tags	table function
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F showfields

F showhashedauthors

F showtables

F showvariants

typesetters F author

F string

table

usedentries writers

usedataset

F author F keyword

F pagenumber

F range

function function table

# regimes (context)

cleanup	function	process	function
disable	function	push	function
enable	function	toregime	function
fromregime	function	translate	function
рор	function		

# resolvers (context)

allamafiyaa	function	findtexfile	function
allprefixes	function	findwildcardfile	function
appendhash automount	function	findwildcardfiles	function
	table	formatofsuffix	function
automounted booleanvariable	function	formatofvariable	function
cacheversion		formats	data table
checkedvariable	string function		data table
		generators	
cleanedpathlist	function	get_from_content	function
cleanpath	function function	getenv	function
cleanpathlist		getownpath	function
concatinators	data table	getreadfilename	function
configbanner	string	hashers homedir	data table
criticalvars	data table data table		string +able
dangerous	function	inputstack	table function
datastate defaultsuffixes		installinputfilehandler	function
dowithfilesandreport	table function	installinputlinehandler instance	table
dowithfilesintree	function		table
	function	D data	
dowithpath dowithvariable	function	B diskcache	
env	function	D environment	
executers	table	D expansions D fakepaths	
expandbraces	function	D files	
expandedpathfromlist	function	B force suffixes	
expandedpathlist	function	D found	
expandedpathlistfromvariable	function	D foundintrees	
expandpath	function	D hashed	
expandpathfromvariable	function	D hashes	
expansion	function	D lists	
extendtexmfvariable	function	B loaderror	
filtered from content	function	D order	
find file	function	D pathlists	
find files	function	T pathstack	
findbinfile	function	B remember	
findctxfile	function	B renewcache	
finders	data table	B renewtree	
findfile	function	B savelists	
findfiles	function	D setups	
findgivenfile	function	D specification	
findgivenfiles	function	D variables	
findpath	function	jobpath	function
pw	. 3110 02311	7	. GITC CIOII

F currentcomponent F currentproduct F currentproject F currentproject F justacomponent F currentproject F justacomponent F currentproject F justacomponent F productromponent F productromponent F productromponent F productromponent F usefile Joinpath Load	jobs	table	registerextrapath	function
F currentproduct F currentproduct F currentproject F currentproject F currentproject F currentproject F currentproject F justacomponent F justacomponent F productcomponent F productcomponent F usefile Joinpath Load	F currentcomponent		•	function
F currentproduct F currentproject F currentproject F currentproject F currentproject F justacomponent D processors F productcomponent F usefile F usefile F unction I oad F unction I oad F unction I oad I	F currentenvironment		_	function
F currentproject F justacomponent D processors F productcomponent F usefile Joinpath Load Load Load F function Loadbinfile Loadlualib Loadtrie Loadtualib Loadtrie Lo	F currentproduct			function
F justacomponent D processors Productcomponent F usefile F usefile F unction F usefile F unction F usefile F unction I coad F unction I coaders I data table F unction I resetextrapath F unction I resetemstream F unction I resetmenterem F unction F unction F unction F unction F resetmenterem F unction F reconvertile F decodecomment F reconvertile F reconvertile F renablecomment F reconvertile F renablecomment F reconvertile F renablecomment F reconvertile F renablecomment F recthable F reconvertile F renablecomment F recthable F reconvertile F renablecomment F rethable F rethable F reconvertile F renablecomment F rethable F rethable F renablecomment F rethable F reconvertile F renablecomment F rethable F rethable F renablecomment F rethable F renablecomment F rethable F retha	F currentproject			function
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F decodecomment F enablecomment F enablecomment F encodecomment F preprocessed F preprocessed F processmk F processmk F processmkvi F version F version F tunction F	macros	table	F strip	
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<pre>pushpath function unexpandedpathlist function</pre>	·		• •	
	pushpath	function	unexpandedpathlist	function

unresolve updaterelations updatescript uselibrary usertypes	function	validatedpath	function
	function	variable	function
	function	variableofformat	function
	function	variableofformatorsuffix	function
	data table	wildcardpattern	function
usezipfile	function	·	

# sandbox (context)

binaryhandler	function	redefine	function
disablerunners	function	register	function
enable	function	registerbinary	function
filehandlerone	function	registerroot	function
filehandlertwo	function	registerrunner	function
finalizer	function	report	function
initializer	function	run	function
iohandler	function	runhandler	function
logcalls	function	setfilenamelogger	function
logfiles	function	setlogger	function
original	function	setreporter	function
overload	function	settrace	function
possiblepath	function	validfilename	function

### scripts (context)

#### autofontfeature table

F disable

F enable

F handler

N inter\_char\_half\_shrink\_factor

N inter\_char\_half\_stretch\_factor

N inter\_char\_hangul\_penalty

N inter\_char\_quarter\_shrink\_factor

N inter\_char\_quarter\_stretch\_factor

N inter\_char\_shrink\_factor

N inter\_char\_stretch\_factor

N inter\_word\_stretch\_factor

handlers data table table hash iniectors data table installdataset function installmethod function numbertocategory data table numbertodataset data table numbertohandler data table reset function function set data table splitters

# set (context)

contains function
create function
tolist function

tonumber function
totable function

#### socket (extra lua)

**BLOCKSIZE** number S connection boolean DEBUG S content-description SETSIZE number S content-disposition bind function S content-encoding function choose S content-id function connect S content-language connect4 function S content-length function connect6 S content-location dns table S content-md5 F getaddrinfo S content-range F gethostname S content-transfer-encoding F getnameinfo S content-type F tohostname S date F toip S diagnostic-code ftp table S dsn-gateway S PASSWORD S etag N PORT S expect N TIMEOUT S expires S USER S final-log-id F command S final-recipient F get S from F open S host F put S if-match gettime function S if-modified-since headers table S if-none-match T canonic S if-range S accept S if-unmodified-since S accept-charset S in-reply-to S accept-encoding S keywords S accept-language S last-attempt-date S accept-ranges S last-modified S action S location S max-forwards S age S allow S message-id S alternate-recipient S mime-version S arrival-date S original-envelope-id S authorization S original-recipient S bcc S pragma S cache-control S proxy-authenticate Scc S proxy-authorization S comments S range

S received	protect	function
S received-from-mta	select	function
S references	sink	function
S referer	sinkt	table
S remote-mta	F close-	when-done
S reply-to	F defaul	t
S reporting-mta	F http-c	hunked
S resent-bcc	F keep-o	pen
S resent-cc	skip	function
S resent-date	sleep	function
S resent-from	smtp	table
S resent-message-id	S DOMAIN	
S resent-reply-to	N PORT	
S resent-sender	S SERVER	
S resent-to	N TIMEOU	Т
S retry-after	S ZONE	
S return-path	F messag	e
S sender	F open	
S server	F send	
S smtp-remote-recipient	source	function
S status	sourcet	table
S subject	F by-len	gth
S te	F defaul	t
S to	F http-c	hunked
S trailer	F until-	
S transfer-encoding	tcp	function
S upgrade	tcp6	function
S user-agent	tp	table
S vary	N TIMEOU	
S via	F connec	
S warning	try	function
S will-retry-until	udp	function
S www-authenticate	udp6	function
S x-mailer	url	table
http table	F absolu	te
N PORT	F build	
N TIMEOUT	F build_	
S USERAGENT	F escape	
F open	F parse	
F request	F parse_	
<b>newtry</b> function	F unesca	pe

#### sorters (context)

basicsorter function
comparers table
 F basic

constants table
 S defaultdigits
 S defaultlanguage
 S defaultmethod
 N digitsmaximum

N digitsoffset
N ignoredoffset
N replacementoffset

T validmethods

B mc B mm B pc B pm
B uc
B zc
B zm

definitions
firstofsplit
packch
packuc
setlanguage
sort
splitters
data table
function
function
function
function
table

F utf

strip function
tracers data table
update function

# statistics (context)

checkfmtstatus	function	resettiming	function
elapsed	function	runtime	function
elapsedindeed	function	savefmtstatus	function
elapsedseconds	function	show	function
elapsedtime	function	starttiming	function
enable	boolean	stoptiming	function
formatruntime	function	threshold	number
hastiming	function	timed	function
memused	function	tracefunction	function
register	function		

# status (basic tex)

list function
resetmessages function

# storage (context)

allocate	function	noftables	number
data	table	register	function
mark	function	shared	data table
marked	function	storedfunctions	data table
max	number	strip	boolean
min	number	tofmodules	number
nofmodules	number	toftables	number

# streams (context)

collect	function	push	function
disable	function	start	function
enable	function	stop	function
flush	function	synchronize	function
initialize	function		

# string (basic lua)

autodouble	function	optionalquoted	function
autosingle	function	quote	function
booleanstring	function	quoted	function
byte	function	rep	function
bytepairs	function	replacenewlines	function
bytes	function	reverse	function
char	function	split	function
characterpairs	function	splitlines	function
characters	function	splitup	function
checkedsplit	function	strip	function
collapsespaces	function	sub	function
count	function	tformat	function
dump	function	toHEX	function
escapedpattern	function	toboolean	function
explode	function	tobytes	function
find	function	tocontext	function
format	function	todec	function
formatter	function	todimen	function
formatters	function	tohex	function
fullstrip	function	tonodes	function
gmatch	function	topattern	function
gsub	function	totable	function
is_boolean	function	toutf	function
is_empty	function	tracedchar	function
itself	function	tracedchars	table
len	function	unquote	function
limit	function	unquoted	function
longtostring	function	upper	function
lower	function	utfcharacters	function
match	function	utfvalues	function
nspaces	table	valid	function

# structures (context)

atlocation	function	F previous	
blocks	table	F raw	
D collected		F record	
F define		F reset	
F print		F restart	
F save		F restore	
F select		F save	
F setstate		F set	
D states		F setlevel	
D tobesaved		F setoffset	
bookmarks	table	F setown	
T extras		F setstate	
F get		F setvalue	
F mergesections		T specials	
F register		F userpage	
F reset		F subs	
F tosections		D tobesaved	
F finalize		F value	
F flatten		F way	
F installhandler		currentsectionnumber	function
F merge		descriptions	table
S method		documents	table
F overload		D data	
F place		F initialize	
F register		F preset	
F setup		F reset	
counters	table	floats	table
F add		formulas	table
F analyze		helpers	table
F check		F analyze	
D collected		F formulanumber	
F compact		F merged	
F converted		F page	
F currentvalue		F pageofinternal	
D data		F prefix	
F define		F prefixlastpage	
F first		F prefixpage	
F get		F simplify	
F last		F title	
F next		F touserdata	
F prev		inserts	table

D data		F savedlistnumber
F define		F savedlistprefixednumber
F getdata		F savedlisttitle
F getlocation		D sectionblocks
F getname		F sectionnumber
F getnumber		F size
F setlocation		F title
F setup		D tobesaved
D stored		F userdata
itemgroups	table	F uservalue
lists	table	marks table
F addto		D data
F analyze		F define
B autoreorder		F exists
D cached		F fetch
D collected		F fetchallmarks
F discard		F fetched
F enhance		F fetchonemark
T enhancers		F fetchtwomarks
F filter		F get
F formulanumber		F number
F getresult		F relate
F groupindex		F reset
F hasnumberdata		F set
F haspagedata		F show
F hastitledata		F synchronize
F iscached		F title
D kinds		T tracers
F label		F showtable
F location		<b>notes</b> table
D names		F checkpagechange
F number		F define
D ordered		F doifonsamepageasprevious
F page		F get
F popnesting		F getdeltapage
F prefix		F getinternal
F prefixednumber		F getn
F prefixedpage		F getstate
F process		F hascontent
D pushed		F internal
F pushnesting		F internalid
F realpage		F listindex
F reordered		F ordered
T result		F postpone

F resetpostponed		D flaginternals
F restore		F from
F save		D functions
F setstate		F get
D states		F getcurrentmetadata
F store		F getcurrentprefixspec
pages	table	F getinnermethod
F analyze		F getinternalcachedlistreference
D collected		F getinternallistreference
F in_body		F getinternalreference
F is_odd		D handlers
N nofpages		F identify
F number		F import
F on_right		F inject
F save		F injectcurrentset
D tobesaved		S innermethod
references	table	D internals
F analyze		F load
F checkedfile		F loadpresets
F checkedfileorurl		F mark
F checkedprogram		D pages
F checkedrealpage		U prefixsplitter
F checkedurl		D productdata
D collected		T programs
U componentsplitter		T data
F currentmetadata		F define
F currentorder		F get
D currentset		F realpageofpage
F define		U referencesplitter
D defined		D referred
D derived		F referredpage
F enableinteraction		F registerfinalizer
F enhance		F registerinitializer
D executers		F registerpage
F expandcurrent		F reportproblems
F export		F reset
T files		D runners
T data		F set
F define		F setandgetattribute
F found		F setcomponent
F get		F setinnermethod
F filter		F setinternalreference
F filterdefault		F setnextinternal
D filters		F setnextorder

F setreferencereal	.page	F	prepare	
D specials		F	process	
F splitcomponent		F	setmethod	
F splitprefix		F	sort	
F splitreference		F	store	
F synchronizepage		D	tobesaved	
T testrunners		F	unique	
F inner		F	userdata	
F special		sect	ions	table
F special operat	ion	F	autodepth	
F special operat	ion with arguments	F	cct	
T testspecials		D	collected	
F deltapage		F	current	
Fi		F	currentblock	
F internal		F	currentid	
F page		F	currentlevel	
F realpage		F	currentsectionindex	
F section		F	depthnumber	
F userpage		F	finddata	
D tobereferred			findnumber	
D tobesaved		F	fullnumber	
D tracedpages		F	getcurrentlevel	
T urls			getlevel	
T data			getnumber	
F define			internalreference	
F found			levelmap	
F get			levels	
F untex			load	
D usedinternals			matchingtilldepth	
D usedviews			numberatdepth	
F valid	+-61.0		numbers	
registers	table		popblock	
F analyze			prefixedconverted	
D collected			pushblock	
F compare F define			register registered	
F enhance			_	
F extend			reportstructure save	
F filter			sectionblockdata	
F filtercollected		'	T bodypart	
F finalize			S bookmark	
F findinternal		F	set	
F flush			setblock	
F get			setchecker	
. 900				

F setentry		tags		table
F setinitialblock		F	elementtag	
F setlevel		F	finishexport	
F setnumber		F	getid	
F structuredata		F	handler	
F title		D	labels	
D tobesaved		F	last	
F typesetnumber		F	lastinchain	
F userdata		F	locatedtag	
B verbose		Т	patterns	
sets	table		U splitter	
F define		D	properties	
F get		F	registermetadata	
F getall		F	restart	
D setlist		F	setaspect	
specials	table	F	setattributehash	
D collected		F	setcombination	
F retrieve		F	setfigure	
F store		F	sethighlight	
D tobesaved		F	setitem	
synonyms	table	F	setitemgroup	
F analyzed		F	setlist	
D collected		F	setnotation	
F compare		F	setnotationsymbol	
F define		F	setproperty	
F filter		F	setregister	
F finalize		F	setsorting	
F flush		F	setsynonym	
F isshown		F	settablecell	
F isused		F	settabulatecell	
F meaning		F	settagdelimitedsymbol	
F prepare		F	settagsubsentencesymbol	-
F process		F	setupexport	
F register			setuserproperties	
F registershown			specifications	
F registerused			start	
F resetshown			stop	
F resetused			strip	
F sort			taglist	
F synonym			usewithcare	
D tobesaved			T images	

# table (basic lua)

allkeys	function	prepend	function
append	function	print	function
are_equal	function	remove	function
autokey	function	reverse	function
compact	function	reversed	function
concat	function	save	function
contains	function	sequenced	function
сору	function	serialize	function
count	function	setmetatablecall	function
derive	function	setmetatableindex	function
deserialize	function	setmetatablekey	function
drop	function	setmetatablenewindex	function
fastcopy	function	sort	function
fastserialize	function	sorted	function
filtered	function	sortedhash	function
flattened	function	sortedhashkeys	function
foreach	function	sortedhashonly	function
foreachi	function	sortedindexonly	function
fromhash	function	sortedkeys	function
getmetatablekey	function	sortedpairs	function
getn	function	sparse	function
has_one_entry	function	strip	function
identical	function	sub	function
imerge	function	swapped	function
imerged	function	tocontext	function
insert	function	tocsv	function
is_empty	function	tofile	function
keys	function	tohandle	function
load	function	tohash	function
loweredkeys	function	toxml	function
maxn	function	twowaymapper	function
merge	function	unique	function
merged	function	unnest	function
mirrored	function	unpack	function
pack	function	values	function

# tex (basic tex)

- A A A A A A A A A A A A A A A A A A A	4-61-		£
attribute	table	gettoks	function
badness	function	getuccode	function
box	table	glue	table
catcode	table	hashtokens	function
conditionals 	data table	ifs	data table
constants	data table	inicatcodes	number
count	table	init_rand	function
cprint	function	isattribute	function
ctdcatcodes	number	isbox	function
ctxcatcodes	number	iscount	overloaded function
definefont	function	isdefined	function
delcode	table	isdimen	overloaded function
dimen	table	ismuskip	overloaded function
directives	data table	isskip	overloaded function
enableprimitives	function	istoken	function
error	function	istoks	function
extraprimitives	function	lccode	table
finish	function	linebreak	function
fontidentifier	function	lists	table
fontname	function	lua_math_random	function
fprint	function	lua_math_randomseed	function
get	function	luacatcodes	number
getattribute	function	mathcode	table
getbox	function	modes	data table
getboxresourcedimensions	function	muglue	table
getcatcode	function	muskip	table
getcount	function	nest	table
getdelcode	function	nilcatcodes	number
getdelcodes	function	normal_rand	function
getdimen	function	notcatcodes	number
getglue	function	number	function
getlccode	function	primitives	function
getlist	function	print	function
getmath	function	prtcatcodes	number
getmathcode	function	resetparagraph	function
getmathcodes	function	romannumeral	function
getmuglue	function	round	function
getmuskip	function	run	function
getnest	function	saveboxresource	function
getsfcode	function	scale	function
getskip	function	scantoks	function

set	function	skip	table
setattribute	function	sp	function
setbox	function	splitbox	function
setcatcode	function	sprint	function
setcount	function	systemmodes	data table
setdelcode	function	takebox	function
setdimen	function	texcatcodes	number
setglue	function	toks	table
setlccode	function	tpacatcodes	number
setlist	function	tpbcatcodes	number
setmath	function	tprint	function
setmathcode	function	trackers	data table
setmuglue	function	triggerbuildpage	function
setmuskip	function	txtcatcodes	number
setnest	function	type	function
setsfcode	function	uccode	table
setskip	function	uniform_rand	function
settoks	function	uniformdeviate	function
setuccode	function	uprint	function
sfcode	table	useboxresource	function
shipout	function	vrbcatcodes	number
show_context	function	write	function

### texconfig (basic tex)

error\_linenumberexpand\_depthnumberformatnamestringhalf\_error\_linenumberhash\_extranumber

kpse\_init boolean
max in open number

max\_print\_line number
max\_strings number
nest\_size number
param\_size number
save\_size number
shell escape string

# texio (basic tex)

setescape function
write function

write\_nl function

# tokens (context)

astable	function	defined	function
bgroup	userdata	egroup	userdata
bits	table	getters	table
N active		F box	
N alignment	t	F count	
N begingrou	ηp	F dimen	
N characte	r	F glue	
N close		F skip	
N comment		F token	
N endgroup		hbox	userdata
N endofline	9	istoken	function
N escape		letter	function
N ignore		letters	function
N invalid		other	function
N letter		pickup	function
N mathshift	t	printlist	function
N open		scanners	table
N other		F boolean	
N paramete	r	F code	
N space		F condition	nal
N subscript	t	F count	
N superscri	ipt	F csname	
N whitespac	ce	F dimen	
collectors	table	F dimensio	n
T data		F glue	
F defaultwo	ords	F integer	
F dowithwo	rds	F keyword	
F flush		F list	
F install		F lxmlid	
F register		F number	
T register	ed	F scanclos	е
F show		F scanoper	
F test		F skip	
compile	function	F string	
constant	function	F token	
converters	table	F tokens	
S toboolear	1	F toks	
S todimen		F word	
S toglue		scantable	function
S tonumber		setters	table
S tostring		F box	

F conditional F count F dimen F count F glue F csname F dimen F macro F skip F dimension shortcuts table F glue T bits F integer N active F kevword F list N alignment N begingroup F lxmlid F number N character F scanclose N close N comment F scanopen N endgroup F skip N endofline F string N escape F token N ignore F tokens N invalid F toks N letter F word N mathshift F scannumber N open F scanopen N other F scanstring N parameter F scanword N space F toboolean N subscript F todimen N superscript T tokens F astable N whitespace N close U bgroup F inspect T collectors F defaultwords N open F dowithwords F report F scanboolean F flush F scanclose F install F scancode F register F scanconditional F show F scancsname F test F scandimen F compile F scandimension F constant F scaninteger T converters F scankeyword S toboolean F scanlist S todimen T scanners S toglue F boolean S tonumber F code S tostring

F defined N open U egroup F report T getters F scanboolean F box F scanclose F count F scancode F dimen F scanconditional F glue F scancsname F skip F scandimen F token F scandimension U hbox F scaninteger F istoken F scankeyword F letter F scanlist F letters F scannumber F other F scanopen F pickup F scanstring F printlist F scanword F scantable F toboolean T setters F todimen F box F tonumber F count F tostring F dimen U vbox F glue U vtop F macro F tonumber F skip F tostring T shortcuts vbox userdata N close vtop userdata

F inspect

### tracers (context)

count function
cs function
dimen function
knownlist function
lists table

T context

T internals
T scratch

name function

primitive function
printerror function
printwarning function
showlines function
strings table

S undefined

toks function
type function

# trackers (context)

data	data table	register	function
default	function	report	function
disable	function	reset	function
dumphashtofile	function	savehash	function
enable	function	show	function
list	function	value	function
name	string		

# typesetters (context)

-14	4-11-		
alignments	table	T handlers	
F handler		F installhandler	
F set	+-h1-	F processmath	
breakpoints	table	F set	
F define		F setcolor	
F handler		F setmath	
D mapping		F tomode	4-61-
T methods		firstlines	table
T numbers		T actions	
F set		F default	
F setreplacement		F line	
cases	table	F word	
T actions		F handler	
F handler		F set	
F register		initials	table
F set		T actions	
characteralign	table	F default	
F handler		F addanchortolin	e
F resetcharacter		F addtoline	
F setcharacteral		F calculatedelta	
characters	table	F checkline	
F handler		F handler	
T methods		F moveinline	
F replacenbsp		F normalize	
F replacenbspace	s	F set	
checkers	table	injectors	table
F handler		F check	
F reset		T list	
F set		F mark	
cleaners	table	F reset	
F handler		F set	
F set		F show	
digits	table	italics	table
T actions		F enablemath	
F handler		F enabletext	
F set		F forcevariant	
directions	table	F handler	
F getfences		F reset	
F getglobal		F set	
F getmethod		kerns	table
F handler		D factors	

F handler		F register	
F keepligature		F reset	
B keeptogether		F split	
D mapping		F startapply	
F set		F stopapply	
manipulators	table	F stripped	
F apply		F tostring	
F applyspecific	ation	showsuspects	function
T methods		spacings	table
F Word		F define	
F Words		F handler	
F abbreviated	journal	D mapping	
F expandedjou	rnal	T numbers	
F lowercase		T frenchpunc	tuation
F stripperiod		T characte	rs
F uppercase		S name	
T patterns		N number	
U list		F reset	
U pair		F set	
F splitspecific	ation	F setup	
margins	table	wrappers	table
F finalhandler		F handler	
F globalhandler	-	xtables	table
F localhandler		F cleanup	
F save		F construct	
marksuspects	function	F create	
paragraphs	table	F finish_row	
F addanchortoli	ne	F flush	
F addtoline		F initialize_o	
F calculatedelt	a	F initialize_r	
F checkline		F initialize_r	eflow_width
F handler		F next_row	
F moveinline		F reflow_heigh	
F normalize		F reflow_width	
F set		F set_construc	:t
<pre>processors     F apply</pre>	table	F set_reflow_r F set_reflow_v	

# unicode (extra lua)

		_	
asci			len
	byte		lower
	char		match
	dump		rep
	find		reverse
	format		sub
	gfind gmatch	utf8	upper table
	gsub		byte
	len		char
	lower		characters
	match		chrlen
	rep		count
	reverse		dump
	sub		filetype
	upper		find
grap			format
	byte		gfind
	char		gmatch
	dump		gsub
	find		is_valid
	format		len
	gfind		length
	gmatch		lower
	qsub	F	magic
F	len	F	match
F	lower	F	remapper
F	match	F	rep
F	rep	F	replacer
F	reverse	F	reverse
F	sub	F	split
F	upper	F	splitlines
lati	<b>n1</b> table	F	sub
F	byte	F	subtituter
F	char	F	tocodes
F	dump	F	toeight
F	find	F	toentities
F	format	F	tostring
F	gfind	F	totable
F	gmatch	F	upper
F	gsub	F	ustring

F utf16\_to\_utf8\_be
F utf16\_to\_utf8\_be\_t
F utf16\_to\_utf8\_le
F utf16\_to\_utf8\_le\_t
F utf16\_to\_utf8\_t
F utf32\_to\_utf8\_be
F utf32\_to\_utf8\_be\_t
F utf32\_to\_utf8\_le
F utf32\_to\_utf8\_le

F utf32\_to\_utf8\_t
F utf8\_to\_utf16
F utf8\_to\_utf16\_be
F utf8\_to\_utf16\_le
F utf8\_to\_utf8\_t
F values
F xstring

#### url (context)

addscheme	function
barepath	function
construct	function
escape	function
filename	function
hashed	function

hasscheme function
query function
split function
toquery function
unescapeget function

## utilities (context)

debugger	table	F stripzeros	
F disable		garbagecollector	table
F enable		F check	
F savestats		N criterium	
F showstats		B enabled	
F showtraceback		lua	table
files	table	B alwaysstripcode	
F close		F compile	
F getposition		F loadedluacode	
F getsize		F loadstripped	
F look		N nofstrippedbytes	
F open		N nofstrippedchunk	5
F read2dot14		B stripcode	
F readbyte		T strippedchunks	
F readbytes		F strippedloadstri	ng
F readcardinal		T suffixes	
F readcardinal1		S lua	
F readcardinal2		S luc	
F readcardinal3		S lui	
F readcardinal4		S luj	
F readchar		S luv	
F readfixed4		S tma	
F readinteger		S tmc	
F readinteger1		S tua	
F readinteger2		S tuc	
F readinteger3		packers	table
F readinteger4		F hashed	
F readstring		F new	
F readtag		F pack	
F setposition		F simplehashed	
F size		F strip	
F skip		F unpack	
F skiplong		N version	
F skipshort		parsers	table
F writebyte		F add_settings_to_a	array
F writecardinal2		F arguments_to_tab	Le
F writecardinal4		F array_to_string	
F writestring		F csvsplitter	
formatters	table	F getparameters	
F formatcolumns		F groupedsplitat	
F list		F hash_to_string	

T hashes F unittoxml T settings\_to\_set report function T max, fit, broad, auto table sequencers B auto F appendaction B broad F appendgroup B fit F compile B max F disableaction T text, hidden, paper, page, leftpage, rightpage F disablegroup B hidden F enableaction B leftpage F enablegroup B page D functions F localize B paper B rightpage F new B text F nodeprocessor F iterator F prependaction F keg to hash F prependgroup F listitem F removeaction F make settings to hash pattern F replaceaction F setkind F mergehashes F options to array F tostring table F options to hash setters T patterns F disable F enable U settings\_to\_array F initialize U settings\_to\_hash\_a U settings\_to\_hash\_b F list U settings to hash c F new U unittotex F register F process stripped settings F report F rfc4180splitter F reset F runtime F show table stacker F settings\_to\_array F settings to array obey fences F new F settings to array with repeat storage table F settings\_to\_hash F allocate F checked F settings\_to\_hash\_strict F settings\_to\_hash\_tolerant F mark F marked F settings\_to\_numbers F setinitializer F settings\_to\_set F sparse F simple\_hash\_to\_string table F splitmethod streams F splitthousands F close F getposition F stepper F look F stripped\_settings\_to\_array

F open

F unittotex

F read2dot14		T striplinepatterns
F readbyte		U collapse
F readbytes		U prune
F readcardinal		U prune and collapse
F readcardinal1		U prune and no empty
F readcardinal2		U retain
F readcardinal3		U retain and collapse
F readcardinal4		U retain and no empty
F readchar		F striplines
F readfixed4		F striplong
F readinteger		F tabtospace
F readinteger1		T tracers
F readinteger2		<b>tables</b> table
F readinteger4		F accesstable
F readinteger4 F readstring		F accesstable F definedtable
<u>s</u>		
F readstring		F definedtable
F readstring F setposition		F definedtable F definetable
F readstring F setposition F size		F definedtable F definetable F encapsulate
F readstring F setposition F size F skip		F definedtable F definetable F encapsulate F insertaftervalue
F readstring F setposition F size F skip F skipbytes		F definedtable F definetable F encapsulate F insertaftervalue F insertbeforevalue
F readstring F setposition F size F skip F skipbytes F skiplong	table	F definedtable F definetable F encapsulate F insertaftervalue F insertbeforevalue F migratetable
F readstring F setposition F size F skip F skipbytes F skiplong F skipshort	table	F definedtable F definetable F encapsulate F insertaftervalue F insertbeforevalue F migratetable F removevalue
F readstring F setposition F size F skip F skipbytes F skiplong F skipshort Strings	table	F definedtable F definetable F encapsulate F insertaftervalue F insertbeforevalue F migratetable F removevalue F replacevalue
F readstring F setposition F size F skip F skipbytes F skiplong F skipshort Strings F collapsecrlf	table	F definedtable F definetable F encapsulate F insertaftervalue F insertbeforevalue F migratetable F removevalue F replacevalue templates table
F readstring F setposition F size F skip F skipbytes F skiplong F skipshort  Strings F collapsecrlf T formatters	table	F definedtable F definetable F encapsulate F insertaftervalue F insertbeforevalue F migratetable F removevalue F replacevalue templates table

F nice

# vf (context)

char	function
down	function
fontid	function
image	function
node	function
nop	function

pop	function
push	function
right	function
rule	function
special	function

## visualizers (context)

escapepatterns	data table	signal	string
getspecification	function	signalpattern	userdata
getvisualizer	function	specifications	data table
load	function	visualize	function
makenested	function	visualizebuffer	function
makepattern	function	visualizefile	function
newgrammar	function	visualizestring	function
newhandler	function	write	function
parsedxml	function	writeargument	function
pattern	function	writedefault	function
register	function	writeemptyline	function
registerescapecommand	function	writenewline	function
registerescapeline	function	writespace	function
registerescapepattern	function		

# xml (context)

addentitiesdoctype	function	D parsedxml	
addspecialcode	function	D string	
after	function	D tex	
all	function	D texline	
applylpath	function	D texspace	
assign	function	D verbose	
attribute	function	defaultprotocol	string
badinclusions	function	delete	function
before	function	<del>delete_element</del>	function
body	function	each	function
builtinentities	table	<del>each_element</del>	<del>function</del>
B amp		elements	function
B apos		elementtocdata	function
B gt		empty	function
B lt		entities	data table
B quot		erase	function
cdata	function	errorhandler	function
cdatatotext	function	escaped	function
checkbom	function	expressions	table
checkerror	function	F boolean	
checknamespace	function	F child	
checkns	function	F contains	
cleansed	function	F count	
collect	function	F error	
collect_elements	<del>function</del>	F find	
collect_tags	function	F idstring	
collect_texts	<del>function</del>	F lower	
collected	function	F name	
collecttexts	function	F number	
content	function	F oneof	
convert	function	F print	
сору	function	F quit	
count	function	F tag	
cprint	function	F text	
css	table	F undefined	
F colorspecification		F upper	
F dimension		fillin	function
F fontspecification		filter	function
F padding		finalizers	table
defaulthandlers	table	F paragraphs	
D file		T tex	

F	all	F match	
	attribute	F name	
	chainattribute	F position	
	chainpath	F reverse	
	command	F table	
-	concat	F tag	
	concatrange	F tags	
	context	F text	
	count	F texts	
	ctxtext	F upperall	
	default	first	function
F	first	found	function
F	function	functions	table
F	index	getbuffer	function
F	last	gethandlers	function
F	lettered	gethandlersfunction	function
	lower	helpers	table
	lowerall	F recursetext	
	match	include	function
F	name	inclusion	function
F	position	inclusions	function
	reverse	index	function
F	stripped	inheritedconvert	function
F	tag	inject	function
F	tags	inject_element	function
F	text	<pre>inject_element_after</pre>	function
F	upper	<pre>inject_element_before</pre>	<b>function</b>
F	upperall	injectafter	function
T x	ml	injectbefore	function
F	all	insert	function
F	att	insert_element	function
F	attribute	<pre>insert_element_after</pre>	<b>function</b>
F	attributes	<pre>insert_element_before</pre>	function
F	cdata	insertafter	function
F	chainattribute	insertbefore	function
F	count	insertcdata	function
F	default	insertcomment	function
F	elements	inspect	function
F	empty	is_valid	function
F	first	kind	function
F	function	last	function
F	index	lastmatch	function
F	last	load	function
F	lowerall	lpath	function

lpathcached	function	save	function
lpathcalls	function	selection	function
lshow	function	separate	function
makestandalone	function	serialize	function
match	function	setcdata	function
name	function	setcomment	function
newhandlers	function	sethandlersfunction	function
nodesettostring	function	setinjectors	function
originalload	function	setproperty	function
package	function	settings	function
parent	function	specialcodes	table
parsedentitylpeg	userdata	S "	
pihandlers	table	S #	
F injector		S \$	
F tex		S %	
placeholders	table	S &	
F unknown_any_entity		S '	
F unknown_dec_entity		S <	
F unknown_hex_entity		S >	
position	function	S \	
privatecodes	table	S {	
privatetoken	function	S	
process	function	S }	
<pre>process_attributes</pre>	<del>function</del>	S ~	
process_elements	<del>function</del>	specialhandler	table
processattributes	function	sprint	function
profiled	table	string	function
raw	function	strip	function
registerentity	function	strip_whitespace	<del>function</del>
registerns	function	stripelement	function
reindex	function	stripleadingspaces	function
remap_name	<del>function</del>	table	function
remap_namespace	function	text	function
remap_tag	function	textonly	function
remapname	function	texttocdata	function
remapnamespace	function	tocdata	function
remaptag	function	toelement	function
renamespace	function	tostring	function
reparsedentitylpeg	userdata	totable	function
replace	function	toxml	function
replace_element	function	tprint	function
resetinjectors	function	traverse	function
resolvens	function	unescaped	function
root	function	unescapedentitylpeg	userdata

unprivatized	function	withelements	function
unspecialized	function	wrap	function
withelement	function	xmlns	table

### zip (extra lua)

archivestableopenarchivefunctionclosefunctionopenfilefunctionclosearchivefunctionregisteredfilestableopenoverloaded functiontypefunction

#### zlib (extra lua)

adler32 function
compress function
compressobj function
crc32 function

decompress function
decompressobj function
version function