

Summary of Grade 1 and 2 Braille

William Park

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1 Braille Alphabets

The following is list of TeX macros and Braille symbols contained in `braille.sty`. The user command `\braille{}` converts sequence of tags to Braille symbols. A tag can be one character which appears as is, or multi characters which must be enclosed with `{}`. For each tag, a predefined TeX macro is called to print out the Braille symbols. For example, `\braille{a{the}b}` prints out Braille symbols for *a*, *the*, and *b*.

As usual, TeX collapses multiple spaces to single space, and ignores spaces at the end of line, and tabs and newlines everywhere. This means that for multi-line paragraph, there must be at least one space after newline (`\n`).

• :	a 1	• :	p	• :	{ed}	• :	, {ea}
• :	b 2	• :	q	• :	{en}	• :	; {bb} {be}
• :	c 3	• :	r	• :	{er}	• :	: {cc} {con}
• :	d 4	• :	s	• :	{for}	• :	. \$ {dd} {dis}
• :	e 5	• :	t	• :	{gh}	• :	! {ff} {to}
• :	f 6	• :	u	• :	{in}	• :	() {gg} {were}
• :	g 7	• :	v	• :	{ing}	• :	{‘‘} ? {his}
• :	h 8	• :	w	• :	{into}	• :	*
• :	i 9	• :	x	• :	{of}	• :	{‘‘} {by} {was}
• :	j 0	• :	y	• :	{ou}	• :	,
• :	k	• :	z	• :	{ow}	• :	- {com}
• :	l	• :	{and}	• :	{sh}	• :	/ {st}
• :	m	• :	{ar}	• :	{th}	• :	[
• :	n	• :	{ble}	• :	{the}	• :]
• :	o	• :	{ch}	• :	{wh}	• :	{.‘}
				• :	{with}	• :	{’.}
				• :		• :	{percent}

Double quotes are specified by the usual TeX notation of 2 consecutive single quotes (`{“}...{”}`). Single quotes are specified by 2 character notation (`{.‘}...{’.}`) similar to actual Braille code. This is because apostrophe (‘) and closing single quote (’) are identical in print and in ASCII text. Also, % must be spelled out, because it is an escape character for comment in TeX.

2 Prefix Indicator

$\begin{array}{c} \cdot \\ \cdot \end{array}$	{Capital}	$\begin{array}{c} \cdot \cdot \\ \cdot \end{array}$	{Number}
$\begin{array}{cc} \cdot & \cdot \\ \cdot & \cdot \end{array}$	{Upper}	$\begin{array}{cc} \cdot & \cdot \\ \cdot & \cdot \end{array}$	{Letter}
$\begin{array}{c} \cdot \\ \cdot \\ \cdot \end{array}$	{Italic}		

3 Contraction for Part of Word

Anywhere	Anywhere	Beginning	Middle	End	
{and}	and	{of}	of	{bb}	bb
{ar}	ar	{ou}	ou	{ble}	ble
{ch}	ch	{ow}	ow	{cc}	cc
{ed}	ed	{sh}	sh	{dd}	dd
{en}	en	{st}	st	{ea}	ea
{er}	er	{th}	th	{ff}	ff
{for}	for	{the}	the	{gg}	gg
{gh}	gh	{wh}	wh	{ing}	ing
{in}	in	{with}	with		

4 Final Letter Contraction for Middle or End of Word

Prefix		Prefix		Prefix	
d	ound	e	ence	n	ation
e	ance	g	ong	y	ally
n	sion	l	ful		
s	less	n	tion		
t	ount	s	ness		
		t	ment		
		y	ity		

5 Initial Letter Contraction for Whole or Part of Word

Prefix		Prefix		Prefix		Prefix	
{the}	these	c	cannot	{ch}	character	p	part
{th}	those	h	had	d	day	q	question
u	upon	m	many	e	ever	r	right
{wh}	whose	s	spirit	f	father	s	some
w	word	{the}	their	h	here	{the}	there
		w	world	k	know	{th}	through
				l	lord	t	time
				m	mother	u	under
				n	name	{wh}	where
				o	one	w	work
				{ou}	ought	y	young

6 Abbreviation for Whole Word

ab	about	c	can	xs	its	rjcg	rejoicing
abv	above	{ch}	child	xf	itself	sd	said
ac	according	{ch}n	children	j	just	{sh}	shall
acr	across	{con}cv	conceive	k	knowledge	{sh}d	should
af	after	{con}cvg	conceiving	lr	letter	s	so
afn	afternoon	cd	could	l	like	{st}	still
afw	afterward	dcv	deceive	ll	little	s{ch}	such
ag	again	dcvg	deceiving	m	more	t	that
ag{st}	against	dcl	declare	m{ch}	much	{the}	the
alm	almost	dclg	declaring	m{st}	must	{the}mvs	themselves
alr	already	d	do	myf	myself	{th}	this
al	also	ei	either	nec	necessary	{th}yf	thyself
al{th}	although	{en}	enough	nei	neither	{to}	to
alt	altogether	e	every	n	not	td	today
alw	always	f{st}	first	o'c	o'clock	tgr	together
{and}	and	{for}	for	{of}	of	tm	tomorrow
z	as	fr	friend	{one}f	oneself	tn	tonight
{be}	be	f	from	{ou}rvs	ourselves	u	us
{be}c	because	g	go	{ou}	out	v	very
{be}f	before	gd	good	pd	paid	{was}	was
{be}h	behind	grt	great	p	people	{were}	were
{be}l	below	h	have	p{er}cv	perceive	{wh}	which
{be}n	beneath	h{er}f	herself	p{er}cvg	perceiving	w	will
{be}s	beside	hm	him	p{er}h	perhaps	{with}	with
{be}t	between	hmf	himself	qk	quick	wd	would
{be}y	beyond	{his}	his	q	quite	y	you
bl	blind	imm	immediate	r	rather	yr	your
brl	braille	{in}	in	rcv	receive	yrf	yourself
b	but	{into}	into	rcvg	receiving	yrvs	yourselves
{by}	by	x	it	rjc	rejoice		

Abbreviation {in} cannot touch any other word or punctuation. And, abbreviations {be}, {enough}, {his} {was}, and {were} cannot touch punctuations.

Abbreviations {by}, {into}, and {to} must adjoin next word without a space. But, abbreviations {and}, {for}, {of}, {the}, {with}, and letter {a} can join one another if they occur as consecutive words.

7 List of All Tags

about	before	day	gg	letter	ount	so	under
above	behind	dd	gh	like	ourselves	some	upon
according	below	deceive	go	little	out	spirit	us
across	beneath	deceiving	good	lord	ow	st	very
after	beside	declare	great	many	paid	still	was
afternoon	between	declaring	had	ment	part	such	were
afterward	beyond	dis	have	more	people	th	wh
again	ble	do	here	mother	perceive	that	where
against	blind	ea	herself	much	perceiving	the	which
ally	braille	ed	him	must	perhaps	their	whose
almost	but	either	himself	myself	question	themselves	will
already	by	en	his	name	quick	there	with
also	can	ence	immediate	necessary	quite	these	word
although	cannot	enough	in	neither	rather	this	work
altogether	cc	er	ing	ness	receive	those	world
always	ch	ever	into	not	receiving	through	would
ance	character	every	it	o'clock	rejoice	thyself	you
and	child	father	its	of	rejoicing	time	young
ar	children	ff	itself	one	right	tion	your
as	com	first	ity	oneself	said	to	yourself
ation	con	for	just	ong	sh	today	yourselves
bb	conceive	friend	know	ou	shall	together	
be	conceiving	from	knowledge	ought	should	tomorrow	
because	could	ful	less	ound	sion	tonight	

8 Examples

- I like computer

Grade 1: I like computer

Grade 2: I {like} {com}put{er}

The image shows a sequence of 16 binary patterns arranged horizontally. Each pattern consists of four vertical columns of dots. The first seven patterns represent the binary numbers 0 through 6. Patterns 8 through 15 represent the binary numbers 128 through 255. The patterns are as follows:

- Pattern 0: Four columns of 0 dots.
- Pattern 1: Column 1 has 1 dot; other columns 0.
- Pattern 2: Columns 1 and 2 have 1 dot; others 0.
- Pattern 3: Columns 1 and 3 have 1 dot; others 0.
- Pattern 4: Columns 1 and 4 have 1 dot; others 0.
- Pattern 5: Columns 2 and 3 have 1 dot; others 0.
- Pattern 6: Columns 2 and 4 have 1 dot; others 0.
- Pattern 7: Columns 1, 3, and 4 have 1 dot; others 0.
- Pattern 8: All four columns have 1 dot.
- Pattern 9: Columns 2, 3, and 4 have 1 dot; others 0.
- Pattern 10: Columns 1, 3, and 4 have 1 dot; others 0.
- Pattern 11: Columns 1, 2, and 3 have 1 dot; others 0.
- Pattern 12: Columns 1, 2, and 4 have 1 dot; others 0.
- Pattern 13: Columns 1, 2, and 3 have 1 dot; others 0.
- Pattern 14: Columns 1, 2, 3, and 4 have 1 dot; others 0.
- Pattern 15: Columns 3 and 4 have 1 dot; others 0.

- This document was created with LaTeX running on Linux

Grade 1: This document was created with LaTeX running on Linux

Grade 2: {Capital}{this} docu{ment} {was} cr{ea}t{ed} {with} LaTeX runn{ing} on L{in}ux

- Summary of grade 1 and 2 braille

Grade 2: Summ{ar}y {of} grade {Number}1 {and} {Number}2 {braille}

The image shows a single row of Braille characters. From left to right, the characters are: a dot-dot-dot sequence, and a dot-dot-dot sequence. These represent the word "WATER" in Braille, where each character is composed of six dots arranged in two columns of three dots each.

- William Park

Grade 1: William Park

- September 1998

Grade 1: September {Number}1998

- I do not have to know how to read braille in order to produce beautifully typeset braille documents. All I have to do is parse ordinary text into tags for which TeX macros exist. TeX will, then, print out predefined symbols associated with each tags.

Grade 2: I {do} {not} {have} {to}{know} h{ow} {to}r{ea}d {braille} {in} ord{er} {to}produce b{ea}uti{ful}ly typeset {braille} docu{ment}s. All I {have} {to}{do} is p{ar}se ord{in}{ar}y text {into}tags {for} {which} TeX macros exist. TeX {will}, {the}n, pr{in}t {out} pr{ed}ef{in}{ed} symbols associat{ed} {with} ea{ch} tags.

A large grid of Braille characters, arranged in approximately 10 rows and 10 columns. Each character is represented by a 2x3 grid of dots. The characters form a pattern where each row contains a different sequence of Braille symbols, creating a visual representation of text.