# Summary of Grade 1 and 2 Braille

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September 1998, April 1999

## 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 |
| ⠃ | b 2 |
| ⠉ | c 3 |
| ⠙ | d 4 |
| ⠑ | e 5 |
| ⠋ | f 6 |
| ⠛ | g 7 |
| ⠓ | h 8 |
| ⠊ | i 9 |
| ⠚ | j 0 |
| ⠅ | k |
| ⠇ | l |
| ⠍ | m |
| ⠝ | n |
| ⠕ | o |

| | |
|---|---|
| ⠏ | p |
| ⠟ | q |
| ⠗ | r |
| ⠎ | s |
| ⠞ | t |
| ⠥ | u |
| ⠧ | v |
| ⠺ | w |
| ⠭ | x |
| ⠽ | y |
| ⠵ | z |
| ⠯ | {and} |
| ⠜ | {ar} |
| ⠮ | {ble} |
| ⠡ | {ch} |

| | |
|---|---|
| ⠫ | {ed} |
| ⠢ | {en} |
| ⠻ | {er} |
| ⠿ | {for} |
| ⠣ | {gh} |
| ⠔ | {in} |
| ⠬ | {ing} |
| ⠩⠔ | {into} |
| ⠷ | {of} |
| ⠳ | {ou} |
| ⠪ | {ow} |
| ⠱ | {sh} |
| ⠹ | {th} |
| ⠮ | {the} |
| ⠱ | {wh} |
| ⠾ | {with} |

| | |
|---|---|
| ⠂ | , {ea} |
| ⠆ | ; {bb} {be} |
| ⠒ | : {cc} {con} |
| ⠲ | . $ {dd} {dis} |
| ⠖ | ! {ff} {to} |
| ⠶ | ( ) {gg} {were} |
| ⠦ | {‘ ‘} ? {his} |
| ⠄⠔ | * |
| ⠶ | {’ ’} {by} {was} |
| ⠄ | ’ |
| ⠤ | - {com} |
| ⠌ | / {st} |
| ⠄⠶ | [ |
| ⠶⠄ | ] |
| ⠄⠶ | {.‘} |
| ⠄⠶ | {’.} |
| ⠶ | {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

| | |
|---|---|
| ⠠ | {Capital} |
| ⠨ | {Upper} |
| ⠸ | {Italic} |

| | |
|---|---|
| ⠼ | {Number} |
| ⠰ | {Letter} |

## 3 Contraction for Part of Word

| Anywhere | |
|---|---|
| {and} | and |
| {ar} | ar |
| {ch} | ch |
| {ed} | ed |
| {en} | en |
| {er} | er |
| {for} | for |
| {gh} | gh |
| {in} | in |

| Anywhere | |
|---|---|
| {of} | of |
| {ou} | ou |
| {ow} | ow |
| {sh} | sh |
| {st} | st |
| {th} | th |
| {the} | the |
| {wh} | wh |
| {with} | with |

| Beginning | |
|---|---|
| {be} | be |
| {com} | com |
| {con} | con |
| {dis} | dis |

| Middle | |
|---|---|
| {bb} | bb |
| {ble} | ble |
| {cc} | cc |
| {dd} | dd |
| {ea} | ea |
| {ff} | ff |
| {gg} | gg |
| {ing} | ing |

| End | |
|---|---|
| {ble} | ble |
| {ing} | ing |

## 4 Final Letter Contraction for Middle or End of Word

| Prefix ⠹ | |
|---|---|
| d | ound |
| e | ance |
| n | sion |
| s | less |
| t | ount |

| Prefix ⠱ | |
|---|---|
| e | ence |
| g | ong |
| l | ful |
| n | tion |
| s | ness |
| t | ment |
| y | ity |

| Prefix ⠴ | |
|---|---|
| n | ation |
| y | ally |

## 5 Initial Letter Contraction for Whole or Part of Word

| Prefix ⠘ | |
|---|---|
| {the} | these |
| {th} | those |
| u | upon |
| {wh} | whose |
| w | word |

| Prefix ⠸ | |
|---|---|
| c | cannot |
| h | had |
| m | many |
| s | spirit |
| {the} | their |
| w | world |

| Prefix ⠐ | |
|---|---|
| {ch} | character |
| d | day |
| e | ever |
| f | father |
| h | here |
| k | know |
| l | lord |
| m | mother |
| n | name |
| o | one |
| {ou} | ought |

| Prefix ⠰ | |
|---|---|
| p | part |
| q | question |
| r | right |
| s | some |
| {the} | there |
| {th} | through |
| t | time |
| u | under |
| {wh} | where |
| w | work |
| y | young |

## 6 Abbreviation for Whole Word

| | |
|---|---|
| ab | about |
| abv | above |
| ac | according |
| acr | across |
| af | after |
| afn | afternoon |
| afw | afterward |
| ag | again |
| ag{st} | against |
| alm | almost |
| alr | already |
| al | also |
| al{th} | although |
| alt | altogether |
| alw | always |
| {and} | and |
| z | as |
| {be} | be |
| {be}c | because |
| {be}f | before |
| {be}h | behind |
| {be}l | below |
| {be}n | beneath |
| {be}s | beside |
| {be}t | between |
| {be}y | beyond |
| bl | blind |
| brl | braille |
| b | but |
| {by} | by |

| | |
|---|---|
| c | can |
| {ch} | child |
| {ch}n | children |
| {con}cv | conceive |
| {con}cvg | conceiving |
| cd | could |
| dcv | deceive |
| dcvg | deceiving |
| dcl | declare |
| dclg | declaring |
| d | do |
| ei | either |
| {en} | enough |
| e | every |
| f{st} | first |
| {for} | for |
| fr | friend |
| f | from |
| g | go |
| gd | good |
| grt | great |
| h | have |
| h{er}f | herself |
| hm | him |
| hmf | himself |
| {his} | his |
| imm | immediate |
| {in} | in |
| {into} | into |
| x | it |

| | |
|---|---|
| xs | its |
| xf | itself |
| j | just |
| k | knowledge |
| lr | letter |
| l | like |
| ll | little |
| m | more |
| m{ch} | much |
| m{st} | must |
| myf | myself |
| nec | necessary |
| nei | neither |
| n | not |
| o'c | o'clock |
| {of} | of |
| {one}f | oneself |
| {ou}rvs | ourselves |
| {ou} | out |
| pd | paid |
| p | people |
| p{er}cv | perceive |
| p{er}cvg | perceiving |
| p{er}h | perhaps |
| qk | quick |
| q | quite |
| r | rather |
| rcv | receive |
| rcvg | receiving |
| rjc | rejoice |

| | |
|---|---|
| rjcg | rejoicing |
| sd | said |
| {sh} | shall |
| {sh}d | should |
| s | so |
| {st} | still |
| s{ch} | such |
| t | that |
| {the} | the |
| {the}mvs | themselves |
| {th} | this |
| {th}yf | thyself |
| {to} | to |
| td | today |
| tgr | together |
| tm | tomorrow |
| tn | tonight |
| u | us |
| v | very |
| {was} | was |
| {were} | were |
| {wh} | which |
| w | will |
| {with} | with |
| wd | would |
| y | you |
| yr | your |
| yrf | yourself |
| yrvs | yourselves |

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

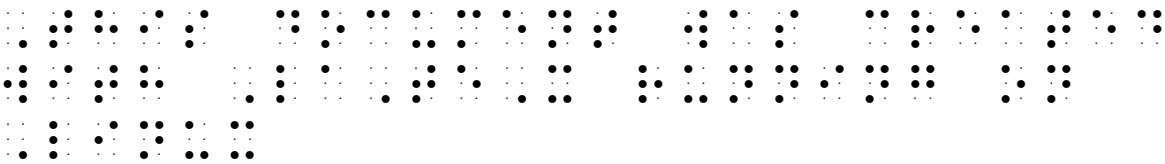
- I like computer

  **Grade 1:** I like computer

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

- This document was created with LaTeX running on Linux

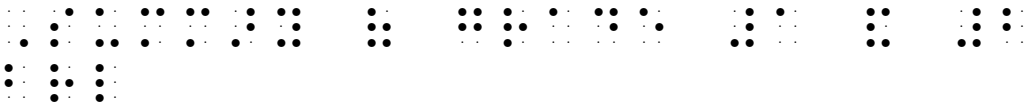
  **Grade 1:** This document was created with LaTeX running on Linux

  **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}

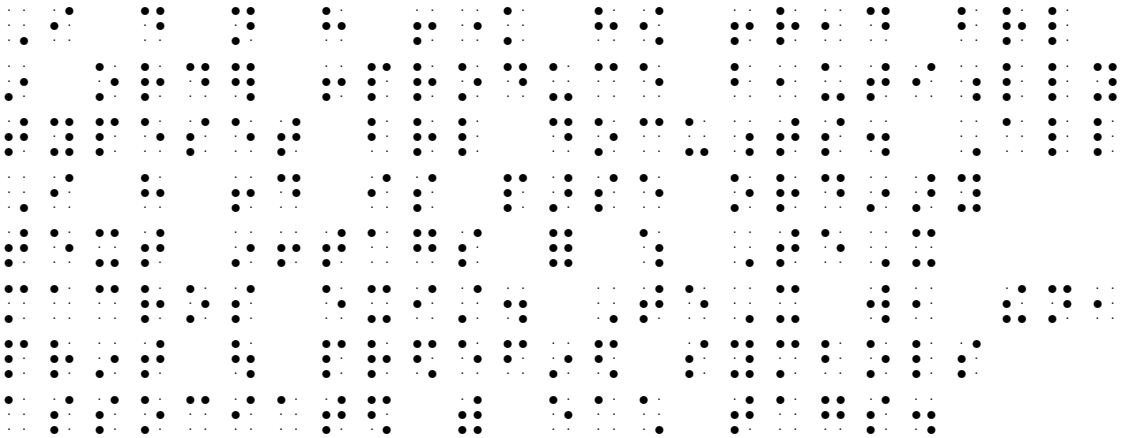


- William Park

  **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.