1 Using MetaCS

METACS provides commands for running and describing commands.

2 Running commands

2.1 \cc - run a parameterless command (switch)

A switch is a control sequence (command) with no arguments, e.g. **\itshape** which switches the current font to italic shape.

FORMAT: $\langle ccf \langle command-name \rangle \rangle$, where $\langle command-name \rangle$ is without the backslash.

EXAMPLE:

```
{ \cc {itshape} } This is italic.) \mapsto This is italic.
```

HOW IT WORKS: \c uses \c #1\cs_end: to construct the control sequence expandably, add the backslash (\) at the front, and then run it.

If the resulting control sequence does not exist, it is no error.

```
\c \{xyz\} \mapsto
```

Items passed in to the construction are expanded.

Reference:

```
\cs:w #1\cs_end:
```

2.2 \cd - run a 1-argument command

\cd runs commands that take one argument, like \textbf {Some text}. FORMAT: \cd{\(\chi command-name\)} \{\(\argument\)}\), where \(\chi command-name\) is the control sequence name without the backslash.

EXAMPLE:

```
\cc {textbf}{Some text} \mapsto Some text \cd {textbf}{Some more text} \mapsto Some more text
```

How it works: \cd builds on \cc's method of constructing a command name by adding an argument.

It is no compilation error if the constructed command is not defined.

```
\cc {\text{textbff}}{\text{Some text}} \mapsto \text{Some text}
```

Reference:

```
\tl_set:Nn \l_my_tl { #2 }
\cs:w #1\cs_end: { \tl_use:N \l_my_tl }
```

2.3 $\backslash cdr$ – print and run code

```
\label{eq:cdr} $$ \cdr = \cdr {\code} \ \ $$ \cdr {\code} \ \ $$ \cdr {\sffamily \large \textsc {Some text}} \mapsto \sffamily \ \ \cdr {\sffamily \large \textsc {Some text}} \mapsto \sffamily \ \cdr = \cdr {\sffamily \cdr} \ \ \cdr = \cdr = \cdr} $$ \cdr = \cdr =
```

How it works: \cdr uses \detokenize to print its argument #1, then leaves argument #1 in the input stream.

Reference: In effect

\detokenize{#1}
\$\mapsto\$
#1

2.4 \cdrq - print and run code in quotation environment

 \cdrq does a \cdr inside a $\ensuremath{\cdr}$ ment.

```
FORMAT: \cdrq{\(code\)}
EXAMPLE:
\cdrq {\ttfamily \tiny \color {red} Example} \\
\ttfamily \tiny \color {red} Example \Decomposition Example}
```