hello.world.

1 User commands

```
\begin{array}{c} basic \\ 4 \\ 72.26999pt \\ 722.7pt \end{array}
```

2 Hooks

Before Begin stuff(outside). At Begin stuff(inside). Begin stuff. This is Stuff! At End stuff(inside). End stuff. After End stuff(outside).

Before Begin equation(outside). At Begin equation(inside).

$$a = b$$
 At End equation(inside). (1)

After End equation(outside).

Before Begin verbatim(outside).Begin verbatim(inside):Some Code.

```
\some \code
End verbatim(inside): Some Code.
```

After End verbatim(outside).

3 Author commands

3.1 Definitions

3.1.1 Macro definitions

```
path of PB
path of UF
path of UF
path of UF
orange= orange= orange= orange
deftestone is defined . After undef, deftestone is undefined.
deftesttwo is defined . After csundef, deftesttwo is undefined.
macro:-¿orange
```

3.1.2 Arithmetic definitions

```
2 + 4 * 8 = 34

3 + 5 * 7 = 38

4 + 6 * 8 = 52

1pt + 2em = 21.00003pt

3pt + 1em = 13.00002pt
```

```
4pt+0.5em=9.0pt 10pt plus 2pt minus 3pt = 10.0pt plus 2.0pt minus 3.0pt 4pt minus 1pt = 4.0pt minus 1.0pt 5mu=5.0mu
```

3.2 Expansion control

full expansion: macro:-¿first expand once: macro:-¿"lvltwo csexpandonce: macro:-¿"lvlone

3.3 Hook management

 $\begin{array}{c} x; \ xAB; \ xABYZ. \\ ABxYZ. \\ xZ. \\ pre-x. \end{array}$

3.4 Patching

patching: ok
example patched here
relax is not patchable
begin is patchable
first and second
appending to paramacro: ok
first and second. Post
prepending to paramacro: ok
Pre. first and second. Post
Bold to italic Bold to italic

3.5 Boolean Flags

boolvar is false.
set to true. boolvar is true.
set to false, boolvar is false

set to false. boolvar is false. set to true. boolvar is true. set to false. boolvar is false. ltxbool is false set to true. ltxbool is true set to false. ltxbool is false set to true. ltxbool is true set to false. ltxbool is false

3.6 Generic Tests

noise is not defined.

begin is defined.

relax is defined.

relax is ifundef: true

relax is ifcsundef: true

nosuchmacro is not a macro

relax is not a macro

begin is a macro

nobeginning is un defined.

begin is defined.

relax is not defparam

begin is not defparam

apptocmd is defprotected

ifdefprotected is defprotected

relax is not defprotected

begin is not defprotected

prefix test begin: false

prefix test noise: false

prefix test newrobustcmd: true

prefix test newrobustcmd: true

ifcsltxprotect relax: false

ifcsltxprotect myltxrobust: true

ifdefempty myempty: true ifdefempty myrelax: false

ifcsvoid myempty: true

ifcsvoid myrelax: false

ifcsvoid letrelax: true

ifcsvoid begin: false

ifdefequal myempty-myrelax: false ifdefequal letrelax-myrelax: false

ifdefequal begin-begin: true

ifdefequal myempty-myempty: true

ifdefstring mymacro-ampersand: true

ifdefstring myrelax-relax: true

ifdefstring myempty-: true

ifdefstring basic-basic: true

ifcsstrequal basic-basic true

ifcsstrequal relax-relax false

ifcsstrequal myempty-relax false

 $if csst requal\ my empty-another empty\ true$

ifdefcounter relax: false

ifdefcounter mymacro: false

ifdefcounter tracingmacros: false

ifdefcounter hfuzz: false

ifdefcounter mycount: true

ifdefcounter mycount, after set: true ifdefcounter latexcounter: false

ifdefcounter latexcounter, after step: false

ifdefcounter myskip: false ifdefcounter mylen: false ifdefcounter mydimen: false ifltxcounter relax: false ifltxcounter mymacro: false ifltxcounter tracingmacros: false

ifltxcounter hfuzz: false ifltxcounter mycount: false ifltxcounter latexcounter: true

ifdeflength relax: false ifdeflength mymacro: false ifdeflength tracingmacros: false

ifdeflength hfuzz: false ifdeflength mycount: false ifdeflength myskip: true ifdeflength mylen: true ifdeflength mydimen: false ifdefdimen relax: false ifdefdimen mymacro: false ifdefdimen tracingmacros: false

ifdefdimen hfuzz: false ifdefdimen mycount: false ifdefdimen myskip: false ifdefdimen mylen: false ifdefdimen mydimen: true ifstrequal test 1 (false): false ifstrequal test 2 (true): true ifstrequal test 3 (true): true ifstrequal test 4 (true): true ifstrequal test 5 (false): false ifstrempty test 1 (true): true ifstrempty test 2 (false): false ifstrempty test 3 (false): false ifstrempty test 4 (false): false ifblank test 1 (true): true ifblank test 2 (false): false ifblank test 3 (false): false ifblank test 4 (true): true notblank test 1 (false): false notblank test 2 (true): true notblank test 3 (true): true notblank test 4 (false): false

ifnumcomp (false): false ifnumcomp (true): true ifnumcomp (false): false ifnumcomp (true): true ifnumcomp (true): true ifboolexpr (false): false ifboolexpr (true): true

3.7 List Processing

Itemize list:

- item1
- \bullet item2
- item3a, item3b
- item4

Poor man's list:

- * item1
- * item2
- * item3a, item3b
- * item4

Dolistloop itemize:

- itemA
- itemB
- itemC

Forlistloop itemize:

- itemA
- \bullet itemB
- \bullet itemC
- Total: 3 items

dolistloop search: item found!

3.8 Miscellaneous Tools

1995 = 1995 116 = 116ifnumless (true): true