Tables in TeX

- creating and manipulating tables in Word or Excel in a childplay

- to create a table in any flavour of TeX you first need to study a dozen pages and keep cheating every time you want to create a new table

- even once you master the syntax, it's still an overkill for simple tables

```
\bTABLE
  \bTR \bTD so much       \eTD \bTD overhead \eTD \eTR
  \bTR \bTD for so simple \eTD \bTD table    \eTD \eTR
\eTABLE
```

so much	overhead
for so simple	table

Tables in TEX

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```
\starttable[|l|l|]
      \HL \VL so much        \VL overhead \VL\SR
      \HL \VL for so simple \VL table     \VL\SR \HL
\stoptable
```

so much	overhead
for so simple	table

Tables in TEX

- I asked Hans and Taco back in 2006 if there was a simpler way to do it

- And the answer was:

```
\startCSV
Sure, nothing
    , easier than that!
\stopCSV
```

Sure	nothing
	easier than that!

(the empty page before this one was just a ConTEXt feature)

How to achieve that?

```
\defineseparatedlist
        [TSV]
        [separator=tab,
         before=\bTABLE,after=\eTABLE,
         first=\bTR,last=\eTR,
         left=\bTD,right=\eTD]

\startTSV
...
\stopTSV
```

syntax – defineseparatedlist

```
\defineseparatedlist [..¹..] [..,..².,..]

1   IDENTIFIER

2   separator  =  comma space spaces tab tabs(missing) TEXT
    quotechar  =  TEXT
    before     =  COMMAND TEXT
    after      =  COMMAND TEXT
    first      =  COMMAND TEXT
    last       =  COMMAND TEXT
    left       =  COMMAND TEXT
    right      =  COMMAND TEXT
    command    =  COMMAND
    setups     =  IDENTIFIER
```

quotechar should trigger 'nontexmode', setups was a MKII hack

syntax – setupseparatedlist

```
\setupseparatedlist [.¹.] [..,.².,..]

1    IDENTIFIER

2    inherits from \defineseparatedlist
```

- when we want to fix something tiny (change number of columns etc.)
- request: syntax only works under MKII

before/after, first/last, left/right

keyword	used for	examples of possible arguments		
before	beginning of table	`\bTABLE`	`\starttable`	`\starttabulate`
after	end of table	`\eTABLE`	`\stoptable`	`\stoptabulate`
first	beginning of row	`\bTR`	`\NC` or `\VL`	
last	end of row	`\eTR`	`\NR`	
left	beginning of cell	`\bTD`		
right	end of cell	`\eTD`	`\NC`	

User request

- It would be nice to have keywords (synonyms) that are easier to remember

  - starttable, stoptable, startrow, stoprow, startcell (column), stopcell
  - beforetable, aftertable, beforerow, afterrow, beforecell (column), aftercell
  - btable, etable, btr, etr, btd, etd
  - btable, etable, brow, erow, bcell, ecell

command=\command

```
\def\SendMe#1#2#3#4{%
  \framed[align={flushleft,lohi},width=8cm,height=3.5cm]
   {#1\crlf#2\crlf\crlf\uppercase{#3\crlf#4}}}

\defineseparatedlist[Address][separator={;},command=\SendMe]
\startAddress
NTG;Maasstraat 2;NL-5836 BB Sambeek;The Netherlands
Dante~e.V.;Postfach 101840;D-69008 Heidelberg;Germany
\stopAddress
```

NTG Maasstraat 2 NL-5836 BB SAMBEEK THE NETHERLANDS	Dante e.V. Postfach 101840 D-69008 HEIDELBERG GERMANY

Advantages

- some effort is needed for setup, but then tables are set semi-automatically

- one can use external files to create nice tables, or other arbitrary documents

- as a disadvantage it is not possible to create complex tables

Using a named list

There are three ways to use it:

- `\startseparatedlist[`*NAME*`]` ... `\stopseparatedlist`
- `\start`*NAME* ... `\stop`*NAME*
- `\processseparatedfile[`*NAME*`][`*filename*`]`

Feature requests

```
\startTSV % separator=tab
a       b
b                       c
\stopTSV
\startMTSV % separator=tabs
a       b
b                       c
\stopMTSV
```

a	b	
b		c

a	b
b	c

Feature requests

```
\defineseparatedlist
  [CSV]
  [separator={,},
   quotechar={"},
   before={\starttabulate[|r|c|l|]},after=\stoptabulate,
   first=\NC,last=\NR,
   left=,right=\NC]

\startCSV
some data,&,"a comma, hidden inside a quote"
quoted quotes,"""","need lots of ""quotes"""
\TeX\ commands,are $\lnot$,processed
UTF-8,should ¬,be a problem
\stopCSV
```

Weird behaviour in MKIV

Should this start a comment or not? What about blank lines?

```
\startCSV
a,b,c,d,e
%,%
b,,

a,b,c,d,e
\stopCSV
```

a	b	c	d	e
b				
a	b	c	d	e

Feature requests

- inherit properties with `\defineseparatedlist`[name][nameofotherlist]
- fix quotechar
- treat data literally (do not implement any of TeX's special sequences; the idea was to trigger that with quotechar and it works OK with MKII)
- allow quoted lines to span over multiple lines
- if TeX commands are respected, multiple blank lines should create one empty line; if not, multiple empty lines
- if TeX commands are respected, comments should be respected as well