1

```
\loop α  β \repeat
\repeat
```

These commands provide a looping construct for TeX. Here α and β are arbitrary sequences of commands and is any of the conditional tests described in "Conditional tests" (p. 'conds'). The `\repeat` replaces the `\fi` corresponding to the test, so you must not write an explicit `\fi` to terminate the test. Nor, unfortunately, can you associate an `\else` with the test. If you want to use the test in the opposite sense, you need to rearrange the test or define an auxiliary test with `\newif` (see above) and use that test in the sense you want (see the second example below).

TeX expands `\loop` as follows:

1) α is expanded.
2) is performed. If the result is false, the loop is terminated.
3) β is expanded.
4) The cycle is repeated.

Example:
```
  \count255 = 6
  \loop
     \number\count255\
     \ifnum\count255 > 0
        \advance\count255 by -1
  \repeat
```
produces:
  6 5 4 3 2 1 0

Example:
```
  \newif\ifnotdone % \newif uses \count255 in its definition
  \count255=6
  \loop
     \number\count255\
     \ifnum\count255 < 1 \notdonefalse\else\notdonetrue\fi
     \ifnotdone
        \advance\count255 by -1
  \repeat
```
produces:
  6 5 4 3 2 1 0