`\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