

# The quick brown fox jumps over the lazy dog

## — The pangram package

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### Abstract

Pangram is a phrase or sentence containing all the letters in an alphabet, usually used for testing fonts. This package provide a (somewhat) simple way for font designers or users to test fonts.

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\*<https://github.com/AlphaZTX/pangram> If you want to maintain this package, just contact me through GitHub issues or pull a request.

5pt The quick brown fox jumps over the lazy dog. 0123456789

6pt The quick brown fox jumps over the lazy dog. 0123456789

7pt The quick brown fox jumps over the lazy dog. 0123456789

8pt The quick brown fox jumps over the lazy dog. 0123456789

9pt The quick brown fox jumps over the lazy dog. 0123456789

10pt The quick brown fox jumps over the lazy dog. 0123456789

11pt The quick brown fox jumps over the lazy dog. 0123456789

12pt The quick brown fox jumps over the lazy dog. 0123456789

14pt The quick brown fox jumps over the lazy dog. 0123456789

16pt The quick brown fox jumps over the lazy dog. 0123456789

18pt The quick brown fox jumps over the lazy dog. 0123456789

20pt The quick brown fox jumps over the lazy dog. 0123456789

22pt The quick brown fox jumps over the lazy dog. 0123456789

24pt The quick brown fox jumps over the lazy dog. 0123456789

30pt The quick brown fox jumps over the lazy dog.

36pt The quick brown fox jumps over the la

40pt The quick brown fox jumps over th

44pt The quick brown fox jumps over

48pt The quick brown fox jumps o

64pt The quick brown fox j

72pt The quick brown fo

96pt The quick brov

## 1 How to use this package

To load the package, just write

```
\usepackage{pangram}
```

in preamble.

Then in your document, write

```
\pangram
```

to get the result like the previous page.

Please notice that `\pangram` will stay in a separate page.

## 2 Options

The `\pangram` command can receive an optional key-val list specifying the details of the pangram page. Here are the keys:

- `textclass` stands for the pangram text in pangram page. The default value is default, yields “The quick brown fox jumps over the lazy dog. 013456789”. `uppercase` and `glass` are also available, which yields “THE QUICK BROWN FOX JUMPS OVER THE LAZY DOG. 0123456789” and “I can eat glass and it doesn’t hurt me.” (although the latter one cannot be regarded as pangram).
- `sizes` for the sizes shown in `\pangram`. Default value is {5pt, 7pt, 8pt, 9pt, 10pt, 11pt, 12pt, 14pt, 16pt, 18pt, 20pt, 22pt, 24pt, 36pt, 48pt, 60pt, 72pt}.
- `linegap` is the line skip between two lines in `\pangram`. Default value is 5pt plus 3pt minus 2pt.
- `tagskip` is the skip between the tag and the pangram text. Default value is 5pt.
- `tagfont` sets the font of tag. Default value is `\ttfamily\footnotesize`.
- `font` sets the font of pangram text. Default value is empty.
- `before` stands for the content before pangram text in pangram page. Default value is empty.

- `after` stands for the content after pangram text in pangram page. Default value is empty.

If you want to set the keys globally, use `\PangramSetup` in your preamble, the argument of `\PangramSetup` is the same as the one of `\pangram`.

Attention! If any of the value to the keys contains an “=” symbol, the value should be put into a group. For example,

```
\pangram[ font={\fontspec{Latin Modern Roman}[Mapping=tex-text]] ]
```

### 3 New pangram text classes

Besides the three pre-defined pangram text classes, you can define your own pangram text classes through `\NewPangramClass`:

```
\NewPangramClass{<text class>}{<text>}
```

### 4 A complicated example

Set the package globally (used in preamble):

```
\PangramSetup{
  sizes={9bp,10bp,12bp,20bp,36bp,44bp,48bp,64bp},
  tagfont=\color{gray}\ttfamily\footnotesize,
}
\NewPangramClass{abc}{abcdefghijklmopqrstuvwxyz}
```

Get the result locally (Needs `fontspec` package and any package provides `\color` command):

```
\pangram[font=\fontspec{Latin Modern Roman}]
\pangram[textclass=glass,
  font={\fontspec{Latin Modern Sans}[Mapping=tex-text]]]
\pangram[textclass=abc,font=\fontspec{Latin Modern Mono}]
```

The text class `abc` here is defined in the previous paragraph.

## 5 The source code

```
1 \<package>
2 \NeedsTeXFormat{LaTeX2e}[2022/06/01]
3 \ProvidesPackage{pangram}[2022/10/09 Pangram, a tool for testing fonts]
```

Use a `clist` to restore the sizes for `\pangram`, and an integer for its index (here we use `index` instead of `int`).

```
4 \ExplSyntaxOn
5 \clist_new:N \l_pangram_sizes_clist
6 \int_new:N \l_pangram_size_index
7 \clist_set:Nn \l_pangram_sizes_clist
8 {
9   5pt, 7pt, 8pt, 9pt, 10pt, 11pt,
10  12pt, 14pt, 16pt, 18pt, 20pt, 22pt,
11  24pt, 36pt, 48pt, 60pt, 72pt
12 }
```

Three pre-defined text classes (token lists) for `\pangram`.

```
13 \tl_const:Nn \c_pangram_text_default_tl
14 { The~quick~brown~fox~jumps~over~the~lazy~dog. ~ 0123456789 }
15 \tl_const:Nn \c_pangram_text_uppercase_tl
16 { THE~QUICK~BROWN~FOX~JUMPS~OVER~THE~LAZY~DOG. ~ 0123456789 }
17 \tl_const:Nn \c_pangram_text_glass_tl
18 { I~can~eat~glass~and~it~doesn't~hurt~me. }
```

`\NewPangramClass` Use way equivalent to `\csname...\endcsname` to define new text classes.

```
19 \NewDocumentCommand \NewPangramClass { m m }
20 {
21   \exp_after:wN \tl_const:Nn \cs:w c_pangram_text_#1_tl \cs_end: { #2 }
22 }
```

Inner function for sizes option. Here use the `xparse`'s new `\IfBlankTF` mechanism to judge if the sizes should be reset.

```
23 \NewDocumentCommand \pangram_resetsizes:n { m }
24 {
25   \IfBlankF {#1} { \clist_set:Nn \l_pangram_sizes_clist { #1 } }
26 }
```

The keys.

```
27 \keys_define:nn { pangram }
28 {
```

```

29   textclass.tl_set:N = \l_pangram_textclass_tl ,
30   textclass.default:n = default ,
31   textclass.initial:n = default ,
32   sizes.code:n       = \pangram_resetsizes:n { #1 } ,
33   linegap.skip_set:N = \l_pangram_linegap_skip ,
34   linegap.default:n  = 5pt plus 3pt minus 2pt ,
35   linegap.initial:n  = 5pt plus 3pt minus 2pt ,
36   tagskip.skip_set:N = \l_pangram_tagskip_skip ,
37   tagskip.default:n  = 5pt ,
38   tagskip.initial:n  = 5pt ,
39   tagfont.tl_set:N   = \l_pangram_tagfont_tl ,
40   tagfont.default:n  = \ttfamily \footnotesize ,
41   tagfont.initial:n  = \ttfamily \footnotesize ,
42   font.tl_set:N      = \l_pangram_font_tl ,
43   before.tl_set:N    = \l_pangram_before_tl ,
44   after.tl_set:N     = \l_pangram_after_tl ,
45 }

```

`\PangramSetup` Set up the package in preamble.

```

46 \NewDocumentCommand \PangramSetup { m }
47 { \keys_set:nn { pangram } { #1 } }

```

`\pangram` The function itself.

```

48 \NewDocumentCommand \pangram { +0{} }
49 {
50   \group_begin:
51   \keys_set:nn { pangram } { #1 }
52   \clearpage
53   \skip_set:Nn \parskip { \c_zero_dim }

```

Use a loop to get all of the entries in the sizes clist.

```

54   \int_set:Nn \l_pangram_size_index { 0 }
55   \tl_use:N \l_pangram_before_tl
56   \int_do_while:nNnn
57   { \l_pangram_size_index } < { \clist_count:N \l_pangram_sizes_clist }
58   {
59     \mode_leave_vertical:
60     \int_incr:N \l_pangram_size_index % index++;
61     \hbox_to_zero:n
62     {
63       \hss
64       \tl_use:N \l_pangram_tagfont_tl

```

```

65         \clist_item:Nn \l_pangram_sizes_clist { \l_pangram_size_index }
66         \skip_horizontal:N \l_pangram_tagskip_skip
67     }
68     \hbox_to_zero:n
69     {
70         \tl_use:N \l_pangram_font_tl
71         \fontsize
72         { \clist_item:Nn \l_pangram_sizes_clist { \l_pangram_size_index } }
73         { \c_zero_dim } % \z@
74         \selectfont
75         \tl_use:c { c_pangram_text_ \tl_use:N \l_pangram_textclass_tl _tl }
76         \hss
77     }
78     \int_compare:nNnT
79     { \l_pangram_size_index } = { \clist_count:N \l_pangram_sizes_clist }
80     { \skip_set:Nn \l_pangram_linegap_skip {0pt} }
81     \par
82     \skip_vertical:N \l_pangram_linegap_skip
83 }

```

The loop ends here.

```

84     \tl_use:N \l_pangram_after_tl
85     \clearpage
86     \group_end:
87 }
88 \ExplSyntaxOff
89 \end{package}

```