esgdwalk package

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Abstract

`esgdwalk` package provides only one command `\DWalk`.

Contents

1 Introduction

I made this package in order to provide a practical example of packing an EXPL3 package.

2 Usage

You can load this package with a line in the preamble of your document.

```
\usepackage[<option>]{esgdwalk}
```

The `<option>` can be specified as following:

```
\usepackage[color=blue]{esgdwalk}
```

then all the lines drawn with `\DWalk` command will be set in blue color.

The only command provided by this package is `\DWalk`.

```
\DWalk{angle=<angle>,forward=<forward>,walk=<walk>}
```

This command makes a drawing area utilizing TikZ and draws (colored) lines according to the rules of:
1. go forward in the length of `forward`
2. turn left in `angle` angle,
3. repeat these actions in `walk` times.

If `angle` is `random`, then `\DWalk` will draw all lines with randomized value of angle.
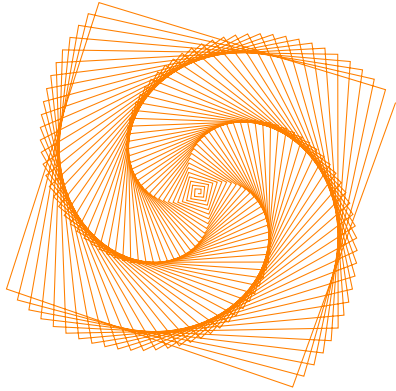
If the value of the key `forward` is `random`, the same as `angle=random`.

When `forward` is given as `forward=a+b`, then the length of the line will be grow increasingly from `a` by `b` on each turn.

This package requires the `tikz` and `esgutil` packages. The latter can be downloaded from my personal website, the url address of which is not known.

3 Example

```
\usepackage[color=orange]{esgdwalk}  %%% preamble
%...
\DWalk{angle=89,forward=0.02+0.02,walk=200}
```

4 Acknowledgements

Many thanks go to the members of ESG.