

# Latex Cookbook

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## Abstract

This is a Latex Cookbook

**Keywords:** keyword1, keyword2, keyword3

## Part I

# Latex Tutorial

## 1 Document Class

### 1.1 Article

Hello Latexers! This is our first Latex document

**PA** Hello, LaTeXers! This is our first LaTeX document.

**Pa1** This document is our starting point for learning LaTeX and writing with it. It would not be difficult.

可以写中文

### 1.2 Text

Produce *italicized* text.

Produce **bold face** text.

Produce SMALL CAPS text.

Produce `typewriter font` text.

Generate underlined text.

### 1.3 List

- Item 1
- Item 2

排序列表的使用方法为：

1. Item 1
2. Item 2

阐述性列表的使用方法为：

- Item 1
- Item 2

### 1.4 Section

In L<sup>A</sup>T<sub>E</sub>X, we can use `fbox` and `parbox` to put a box around multiple lines. In this case, we set the `linewidth` as 0.8.

### 1.5 Insert Picture

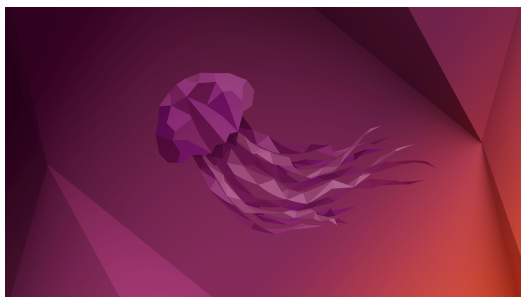


Figure 1: A beautiful butterfly.

## 1.6 Code

```

1  import numpy as np
2
3  x = np.random.rand(4)
4  print(x)
5

```

This is a simple example:

|  |
|--|
| <p><b>Input</b> : <math>x, y \in \mathbb{R}^n</math></p> <p><b>Output:</b> <math>c</math></p> <pre> 1  <math>c = 0;</math> 2  <b>for</b> <math>i = 1</math> <b>to</b> <math>n</math> <b>do</b> 3    <math>c = c + x_i y_i;</math> 4  <b>end</b> </pre> |
|--|

**Algorithm 1:** Inner product of vectors