

New Environments

Spoken Tutorial Project

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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Learning Objectives



Learning Objectives

This tutorial will help the learners to



Learning Objectives

This tutorial will help the learners to

- ▶ **Create or define new environments**



Learning Objectives

This tutorial will help the learners to

- ▶ **Create or define new environments**
- ▶ **to get customized output**



Learning Objectives

This tutorial will help the learners to

- ▶ **Create or define new environments**
- ▶ **to get customized output**
- ▶ **redefine the existing environments**



Prerequisite

To follow this tutorial, You should also have knowledge of



Prerequisite

To follow this tutorial, You should also have knowledge of

- ▶ **commands that are necessary to create a document in LaTeX**



Prerequisite

To follow this tutorial, You should also have knowledge of

- ▶ **commands that are necessary to create a document in LaTeX**
- ▶ **compiling and producing a PDF output in LaTeX**



Prerequisite

- ▶ If not, please go through the relevant LaTeX spoken tutorials on <http://spoken-tutorial.org>



System Requirements



System Requirements

To record this tutorial, I am using



System Requirements

To record this tutorial, I am using

- ▶ **Ubuntu Linux 14.04 OS**



System Requirements

To record this tutorial, I am using

- ▶ Ubuntu Linux 14.04 OS
- ▶ TeXworks version 0.5



New Environment

- ▶ Just like new commands, we can define new environments.



New Environment

- ▶ Just like new commands, we can define new environments.
- ▶ `newenvironment` is used to create/define a new Environment.



New Environment

- ▶ Just like new commands, we can define new environments.
- ▶ `newenvironment` is used to create/define a new Environment.
- ▶ It is used to format blocks of text generally.



New Environment

- ▶ New Environment is a variation of performing few existing commands put together in a sequence.



New Environment

- ▶ **New Environment is a variation of performing few existing commands put together in a sequence.**
- ▶ **Ensure that the custom environment you create is not an already existing LaTeX environment**



New Environment

- ▶ To define a **new environment**, we write

```
\newenvironment{env}{stCmd}{endCmd}
```

where **env** is the environment name,

stCmd is the start commands and **endCmd** is the end commands.



New Environment

- ▶ **Start commands are done whenever the environment starts.**



New Environment

- ▶ **Start commands are done whenever the environment starts.**
- ▶ **And end commands are performed whenever the environment ends.**



New environment with parameters

- ▶ The syntax for newenvironment with parameter is

```
\newenvironment{env}[par]{st}{end}
```



New environment with parameters

- ▶ where **env** is the environment name,



New environment with parameters

- ▶ where **env** is the environment name,
- ▶ **par** is the number of parameter,



New environment with parameters

- ▶ where **env** is the environment name,
- ▶ **par** is the number of parameter,
- ▶ **st** is the start commands and



New environment with parameters

- ▶ where **env** is the environment name,
- ▶ **par** is the number of parameter,
- ▶ **st** is the start commands and
- ▶ **end** is the end commands.



renewenvironment

- ▶ **renewenvironment** is used to change or overwrite the existing environment.



renewenvironment

- ▶ **renewenvironment** is used to change or overwrite the existing environment.
- ▶ The syntax for **renewenvironment** is

```
\renewenvironment{env}{start}{end}
```



renewenvironment

- ▶ where **env** is the environment name,



renewenvironment

- ▶ where **env** is the environment name,
- ▶ **start** is the start commands and



renewenvironment

- ▶ where **env** is the environment name,
- ▶ **start** is the start commands and
- ▶ **end** is the end commands.



Summary

To summarise, we have learnt

- ▶ **newenvironment**
- ▶ **newenvironment with parameters**
- ▶ **renewenvironment**



Assignment

- ▶ Create an environment **itemizecolor**, which takes the color (red, blue, yellow, green) as input and creates a list in that color.



About the Spoken Tutorial Project

- ▶ Watch the video available at http://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- ▶ It summarises the Spoken Tutorial project



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Spoken Tutorial Workshops

The Spoken Tutorial Team

- ▶ Conducts workshops using spoken tutorials
- ▶ Gives certificates for those who pass an online test
- ▶ For more details, please write to contact@spoken-tutorial.org



Acknowledgements

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- ▶ More information on this Mission is available at

<http://spoken-tutorial.org/NMEICT-Intro>

