

# The Linux Environment

**Spoken Tutorial Project**  
**National Mission on Education through ICT**  
**<http://spoken-tutorial.org>**

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# Pre-requisites :

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- ▶ A working Linux System to try out the examples illustrated.
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- ▶ If not, please refer to spoken tutorials on <http://spoken-tutorial.org>



# About the Linux commands

- ▶ **Linux is case sensitive.**



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- ▶ **All the commands used are in lowercase, unless mentioned otherwise.**



# Shell Variables

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# Shell Variables

- ▶ **Linux Environment** determines how the OS behaves, responds, interprets, and so on.
- ▶ **Linux can be highly customized by changing the settings of the shell.**



# Shell Variables

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# Shell Variables

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- ▶ There are two main kinds of shell variables :
  - a Environment Variables
  - b Local Variables



# Environment Variables



# Environment Variables

- ▶ **Available in user's total environment.**



# Environment Variables

- ▶ Available in user's total environment.
- ▶ Also available in the sub-shells spawned by the shell (like the ones used for running shell scripts).



# Local Variables



# Local Variables

- ▶ **Limited availability.**



# Local Variables

- ▶ **Limited availability.**
- ▶ **Not available in the sub-shells spawned by the shell.**



# Environment Variables

- ▶ In this tutorial, we will mainly talk about environment variables.



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- ▶ Let us first see how the value of these shell variables can be seen.



# Shell Variables

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# Shell Variables

- ▶ We would be using the **Bash** shell.
- ▶ Different shells are customized in slightly different ways.
- ▶ To see what a variable actually stores, we have to prefix a **dollar** sign to the name of that variable.
- ▶ Use the **echo** command along with it.



# Shell variable



# Shell variable

- ▶ **SHELL** variable stores the name of the current shell.



# HOME variable



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- ▶ When we login into Linux, it normally places us in a directory named after our user name.
- ▶ This directory is called the Home directory.
- ▶ This is exactly what is available in **HOME** variable.



# PATH Variable



# PATH Variable

## **PATH** variable

- ▶ contains the absolute paths of the directories



# PATH Variable

## **PATH** variable

- ▶ contains the absolute paths of the directories
- ▶ that the **Shell** is supposed to search



# PATH Variable

## PATH variable

- ▶ contains the absolute paths of the directories
- ▶ that the Shell is supposed to search
- ▶ for locating any executable command



# LOGNAME Variable



# LOGNAME Variable

- ▶ **LOGNAME** variable stores the username of the currently active user.



# Summary

**In this tutorial we have learnt about:**

- ▶ **Environment Variables**
- ▶ **History**
- ▶ **Aliasing**



# ACKNOWLEDGEMENT

- ▶ Spoken Tutorials are part of 'Talk to a Teacher' project.
- ▶ Supported by the National Mission on Education through ICT, MHRD, Government of India.
- ▶ More information:

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

