



## A Report on One Day Linux Workshop for Teachers on 23<sup>rd</sup> August 2019

ATME College of Engineering conducted "One Day Linux Workshop for Teachers" on behalf of IIT Bombay as a Remote Centre on 23<sup>rd</sup> August 2019.

The Workshop began with a A-View Live session. Inaugural talk was given by **Prof. Kumar Appaiah** and **Prof. Kannan Moudgalya**- An introduction to Spoken tutorials was discussed. The inauguration was followed by Hands-on Sessions through spoken tutorials. The contents of the workshop was organised into various videos.

### **During Session-1**

#### **1] Introduction to Linux OS and installation process was discussed.**

1. Locate the topic "Installing Software 16.04" and click on it. 2.
2. To view the tutorial, click on the Play icon which is located in the player.
3. "Installing Software 16.04" tutorial explains how to install various software on "Ubuntu Linux 16.04".
4. Once the tutorial is complete, choose the next tutorial from the playlist which is located on the right side or below the player.

#### **2] Linux Environment**

##### **1. 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)

##### **2. Local Variables :**

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

#### **3] General purpose utilities**

##### **echo command**

We need to use the -e option of echo command for using escape sequences:

\t for tab

\n for newline

\c for displaying prompt on the same line after message has been echoed

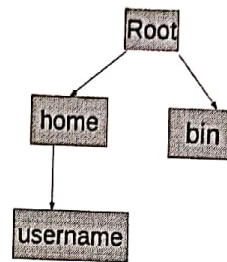
## Session-2

### 4] Basics of System Administration

- adduser command to create a new user account.
- I su command to switch from one user to another user.
- I usermod command for changing the user account settings.

### 5] file system in Linux

- Types of files
- Creating files
- File permissions
- Standard files
- File attributes



## Session-3

### 6] file redirection using pipes

- Manipulate and connect the different streams simultaneously.
- Pipelining
- Create chain of commands
- Connects the output of one command to the input of the next command

It looks like

*command1 | command2 -option | command3 -option1 -option2 | command4*

### 7] Simple filters were discussed such as

- Head
- Tail
- Sort
- cut
- Paste

## Session-4

### 8] Advanced Filters

#### The grep command

Syntax:

`grep [options] pattern [files]`

Example

i) Use of Character class

`grep -i "ch[ao][uw]dh[ua]r[yi]" grepdemo.txt`

- ii) The use of \*  
grep -i "m[ei]\*raa\*" grepdemo.txt

### sed (Stream Editor Command)

- sed is a stream editor
- sed \_nds some pattern of text in a particular location of a le
- It performs some display or editing functions

#### Syntax:

sed OPTIONS... [SCRIPT] [INPUTFILE...]

The workshop was concluded by Questionnaire and Valedictory session

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