

# Government Polytechnic Kotabagh

Branch -CSE final year

Subject ost

## Basic Unix Tools

Basic Unix tools are used to do basic work like find a file, locate a file, set the date and time, display calendar, etc.

There are a number of basic Unix tools. Some of them are listed below.

1. **find**
2. **locate**
3. **date**
4. **cal**
5. **sleep**
6. **time**
7. **zcat / zmore**
8. **bzip2 / bunzip2**
9. **bzcat / bzmore**
10. **df**

## 1-Linux find

The find command help us to find a particular file within a directory. It is also used to find a list of files having same pattern name.

After find command we may use following symbols:

(.) : For current directory name

(/) : For root

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## Finding By Name

You can search all the files ending with extension '.txt'.

### Example:

1. `find . -name "*.txt"`

Look at the above snapshot, all the files ending with '.txt' are listed with find command.

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## Finding By Type

The '-type' parameter is used to specify the file type.

Some of the file types are:

**f:** regular file

**d:** directory

**l:** symbolic links

**c:** character devices

**b:** block devices

### Example:

1. `find . -type d -name "*.bak"`

Look at the above snapshot, command (**find . -type d -name "\*.bak"**) displays all the directories ending with '.bak'.

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## Finding Newer Files

The '-newer' parameter helps in searching the files which are newer than the mentioned file.

### Example:

1. `find . -type d -name ?*.bak?`

## 2-Linux locate

The command `locate` and `find` are used to search a file by their filename. But difference is that `locate` command is a background process and searches the file in database whereas, `find` command searches in filesystem. The `locate` command is much faster than `find` command.

If you are unable to find a file with `locate` command then it means that your database is out of date, and you can update your database with the **updatedb** command.

### Syntax:

1. `locate <fileName>`

### Example:

1. `locate sysctl.conf`

Look at the above snapshot, command "**locate sysctl.conf**" has displayed all the locations of file 'sysctl.conf'.

## 3-Linux date

The `date` command displays date, time, time zone, etc.

### Syntax:

1. `date`

## Date Format

You can display the date in a format of your choice. For this check the man page of date with **man** date command.

## 4-Linux cal

The 'cal' term stands for calender. It displays current month's calender with current day highlighted.

### **Syntax:**

1. cal
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## Displaying Past Or Future Month

You can also display past or future year's month with cal command.

### **Syntax:**

1. cal <month> <year>

## 5-Linux sleep

The sleep command let the terminal wait by the specified amount of time. By default it takes time in seconds.

### **Syntax:**

1. sleep <time>

### **Example:**

1. sleep 5

## 6-Linux time

The time command displays how long it takes to execute a command.

### **Example:**

1. time
2. time sleep 5
3. time date

## 7-Linux zcat

Compressed files or zipped files can be viewed with the help of 'zcat' command.

### **Syntax:**

1. zcat <fileName>

### **Example:**

1. zcat acb

**Note:** The command **zmore** and **zless** works same for zipped files as more and less command works for unzipped files.

## 8-Linux bzip2

The command bzip2 is also used to compress a file like gzip command but takes a little more time but compresses better. Its extension will be **(.bz2)**.

### **Syntax:**

1. bzip2 <fileName>

### **Example:**

1. bzip2 acb

## 9-bunzip2

The command bunzip2 decompress a file like gunzip command.

### **Syntax:**

1. bunzip2 <fileName>

### **Example:**

1. bunzip2 acb.bz2

## 10-Linux df

The 'df' command tells about the disk space used in the file system. It defines the number of blocks used, number of blocks available and the directory where file system is mounted.

### **Syntax:**

1. df