

I N D E X

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IOT (Internet of Things)

The term Internet of Things generally refers to scenarios where network connectivity and computing capability extends to objects, sensors and everyday items not normally considered computers, thus allowing these devices to generate exchange and consume data with minimal human intervention. There is however no single universal definition.

IOT describes the network of physical objects so known as things that are embedded with sensors, software and other technologies that is used for the purpose of connecting and exchanging data with other devices and systems over the internet.

Raspberry Pi

Its a series of small single board computers developed in the UK by the Raspberry Pi Foundation in association with Broadcom.

The Raspberry Pi project originally leaned towards the promotion of teaching basic computer science in schools and in developing countries. Its used in many areas such as weather monitoring etc.

Ques Start Raspberry Pi and try various linux commands in command terminal window. Write a brief description of each command & its function

Linux Commands :-

1. ls : Its used to show directories and files present in the system. Its lists directory contents of files and directories

Eg. ls -l : Display all information about files / directories

2. cd : cd command is known as change directory command It is used to change current working directory.

syntax : cd [directory]

3. touch : Used to create change and modify timestamps of a file .Its used to create a file without any content .

syntax : touch file-name

4. mv : It stands for move . Its used to move one or more files or directories from one place to another in file system .

syntax : mv [option] source destination

5. rm : This command is used to remove object such as files directories and so on from the file system .

syntax : rm [OPTION] -- FILE--

6. man : This command is used to display the user manual of any command.

syntax : man [OPTION]... [COMMAND NAME]

7. mkdir : This command allows the user to create directories

syntax : mkdir [OPTIONS]... [DIRECTORIES]

8. rmdir : This command removes an empty directory

syntax : rmdir [-p] [-v] [verbose] [-ignore-fail-on-non-empty] directories.

9. tar : It stands for tape archive, is used to create archive and extract the archive files

syntax : tar [Options][archive - file] [file or directory to be archived]

10. gzip : This command compresses files

syntax : gzip [options] [files]

11. cat : It reads data from the file and gives this content as output. It helps us to create view, concatenate files.

syntax : cat filename

12. **more** : This command is used to view the text files in command prompt, displaying one screen at a time in case file is large.

Syntax : more [-options] [-num] [+1 pattern] [-lineum] [filename]

13. **less** : This command is linux utility which can be used to read contents of text files one page per time.

Syntax : less filename

14. **ps** : This is for viewing information related with the processes on a system which stands to abbreviate for 'process status'.

Syntax : ps [options]

15. **sudo** : sudo (super user do) command in linux is generally used as a prefix of some command that only superuser can allow to run.

16. **cron** : Automates the scheduled task at a predetermined time. It is daemon process which runs as background process.

Syntax : cron [-f] [-i] [-L [loglevel]]

17. **chown** : This command is used to change file owner or group.

Syntax : ~~chown [OPTION] [OWNER] [: [GROUP]] FILE~~

chown [OPTION] [OWNER] [: [GROUP]] FILE

18. **chgrp** : This command is used to change the group ownership of a file or directory.

Syntax : chgrp [OPTION] - GROUPFILE ..

19. **ping** : PING (Packet Internet Groper) is used to check network connectivity between host and server / host.

20. **chmod** : Its used to change access mode of a file.

Syntax : chmod [reference] [operator] [mode] file

21. **curl** : CUrl is a command line tool to transfer data to or from a server using any of supported protocols.

Syntax : curl [options] URL -]

22. **echo** : Its used to display line of text that are passed as argument.

Syntax : echo [option] [string]

23. **exit** : This command is used to exit shell when its currently running
syntax `exit [n]`

24. **find** : It can be used to find files and directories and perform subsequent operations on them.

syntax : `find [where to start searching from]`

[expression determines what to find]

[options] [what to find]

25. **Finger** : This command is a user information lookup command which gives details of all the user logged in.

syntax : `finger [username]`

26. **free** : A command which displays total amount of free space available along with the amount of memory used and swap memory in the system and also the buffers used by kernel
syntax : `free [OPTION]`

27. **kill** : Its a built-in command which is used to terminate procs. manually