LINUX MODILE -1

1. **What is Linux?**

It is OS, its is multitasking , multiuser which connects one path to anther path.

1. **Differences between Linux and Windows?**

|  |  |
| --- | --- |
| Linux | windows |
| Multi user OS | Single user OS |
| It is both command line interface and  Graphical user interface | only graphical interface |
| Not user friendly(Need coding knowledge) | user friendly in nature |
| More secured compared when it is compare with other OS | Less secure |
| Its is used as server | It is used as client side |

1. **Linux architecture:-**

Hardware

/(root file system)kklsfnf user

**There are two layers between user and hardware**

outer layer is **User and** inner most layer is **Hardware**

1. **SHELL :**

It is interface between **kernel** and **user**. It is also Known as command line interpreter. Gets a request from user and pass to the request to kernel.

[**User** = The programmer]

1. **KERNEL :**

It is interface between **Hardware** and **shell.**  It will provide service to the **Hardware** to access the file to open, read , write, create and updating record. It will enhance the security by validating user request. It is kind of manger which will handle execution, changing of ownership and killing of the processes.

[**Hardware** = it is the innermost layer]

1. **Difference between Compiler and Interpreter:-**

|  |  |
| --- | --- |
| Compiler | Interpreter |
| It runs whole program in one-shot | It runs one by one |
| Machine dependent | It is faster than Compiler |

1. **File system in Linux:**

|  |  |  |
| --- | --- | --- |
| Directory | | Description |
| /(root file system) | | It contains all of the databases or folders or files. |
| /bin | | User executable files. |
| /boot | | To boot Linux computer |
| /dev | | This is the directory contains the device files for every hardware device attached to the system. |
| /etc | | Local system configuration file for the host computer |
| /home | | Each user has a subdirectory in /home |
| /lib | | Contains shared library files that are required to boot the system |
| /media | | A place to mount external removable device such as USB that may be connected to the host |
| /mnt | | It’s a temporary mount point for a system while admin is working or repairing file system |
| /opt | Optional files such as vendor supplied application programs should be located here | |
| /root | This is home directory for the root user | |
| /sbin | These are binary files and executable used for system administration | |
| /tmp | It is used to store temporary files | |
| /user | These are shareable , read only files, including executable binaries and libraries, man files and other documentation. | |
| /var | Variable data files are stored here like MySQL, webserver date file etc. | |