Day 12

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Storage Management

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Partition

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its means divide a harddisk to no of parts is called partition

Ex:house

in a house divided rooms its comportable

partition criteria

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two types

MBR---master boot record

GPT---guid partition table

MBR

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in harddisk mbr stored default

then create p1,p2,p3

p means primary partition

then create extended partition

in their create 12 logical partitions

and then remaining free space for further using extended partition

MBR---16 partitions--(3p,1E,12L)----2TB

GPT

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in harddisk GPT stored default

then create primary partitions up to 128

then free space

GPT--128 primary partitions---2ZB

1024bytes--1kb

1024kb-----1mb

1024mb----1gb

1024gb-----1tb

1024tb-----1pb--peta byte

1024pb-----1eb---exha byte

1024eb------1zb----zeta byte

Disk Identification

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different types of disks available in linux

1.IDE drive will be shown as ---/dev/hda

2.SCSI drive will be shown as ---/dev/sda

3.Virtual drive will be shown as ----/dev/vda

File Systems

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s no name year feature size

1 ext2

(second extended) 1993 journaling 16GB-2TB

2 ext3

(third extended) 2001 journaling 16GB-2TB

3 ext4

(fourth extended) 2008 journaling 16GB-16TB

4 xfs

(extens file system) 1993 journaling 16GB-8EB

Journaling Feature

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it means suppose un expectly os or files folders

remove then give the backup is called

journaling feature

Mounting

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attaching a directory to filesystem is called mounting

Ex:pendrive attach to laptaps then create drive

in linux attach to the folders is called mounting

its divided into two types

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1.temporary

2.perminent

temporary means temporary mounting

that imformation will be in a file

/etc/mtab

perminent means suppose system or server is reboot then mount

is available is called perminent

that imformation will be in a file

/etc/fstab

commands

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lsblk-------show the hard disk imformation

df-----------show the disk free

df -Th------show the type imformation of disk in human format

fdisk -l------show the partition imformation

parted -l-----show the partition imformation with sizes

how to attach new hard disk to server

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-----go to aws

------ec2

------volumes

--------create volumes

----------ssd

---------select availability zone

----------give ur size ex:10gb

----------create volume

----------give name to volume

----------click actions

---------attach volume

---------select rumming server with same availability zones

----------select disk name

---------- click on attach volune

how to make partitions

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fdisk diskname

ex:fdisk /dev/xvdb

g---create gpt table

n---new partition

-----partition number

------partition size wit + ex:+2gb

enter

show the partitions enter p

save the partitions enter w

delete partition enter d

how to attach file system

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first show the file system

file -s disknam

ex:file -s /dev/xvdb

output is data no file system

then create filesystem xfs

mkfs -t xfs diskname

mkfs -t xfs /dev/xvdb

then show file -s /dev/xvdb

create a directory

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ex:mkdir myvolume

mounting to the file system

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mount diskname folderpath

ex:mount /dev/xvdb /root/myvolume

its temporary mount

go to vim /etc/mtab

copy the last entry start with /dev/xvdb

paste in vim /etc/fstab

save it then give

mount -a

this is perminent mount

suppose change size of harddisk

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go to aws volumes modify size enter

and check the size

unmount the filesystem

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umount folderpath

ex:umount /root/myvolume

