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Class 12
Swap partition
/ , /boot
Swap = it is use to save the pending instruction in temporary form when RAM is full
Basic rule to make swap
If RAM is less than or equal to 2GB = swap size = 2xRAM size = 2x1GB = 2GB
If RAM size more than 2GB - 8GB = 2+RAM size = 2+4GB = 6GB
If RAM size is more then 8 GB = same size = 12GB RAM = 12GB
We can make swap partition from 2 type
   1. When we have spare space in HD = swap as partition
   2. We have no space = swap as file
Swap as partition
See the RAM size = free -h
Check the swap = swapon -s
Make a partition and give the id 82
Primary - 83
Extended = 5
Logical = 83
Swap = 82
LVM = 8e
RAID = fd
Press t for change the id
Mkswap /dev/sda1
Swapon /dev/sda1
Vim /etc/fstab
/dev/sda1
                               defaults
             swap
                     swap
                                          0 0
:wq
Mount -a
Off the swap
```

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2 way - swap as a file

500 GB Hard disk = /=400GB , /boot -100GB

/= 400GB = 300GB
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Swapoff /dev/sda1

```
if=/dev/zero of=/harshil bs =1GB count =2
Dd
   = command to make file as partition
Dd
if=/dev/zero = partition number
 of=/harshil = file name
 bs =1GB = block size =1GB
count =2
2x1GB = 2GB
Bs =500MB
Count = 8
8x500MB = 4000MB = 4GB
Mkswap /harshil
Chmod 600 /harshil = change the permission
Vim /etc/fstab
/harshil swap swap
                       defaults 0 0
:wq
Mount -a
Swapon /harshil
File =2GB
Partition = 4GB
Give the password the partition (LUKS = linux unified key setup)
Make a partition not format it
Give the password
Cryptsrtup luksFormat /dev/sda1
]YES
] give the password (complex = phone no)
Open the partition
Cryptsetup luksOpen /dev/sda1 india
]give the password
Format
Mkfs.ext4 /dev/mapper/india
/dev/sda1 = /dev/mapper/india
Mkdir /test
```

Vim /etc/fstab

/dev/mapper/india /test ext4 defaults 0 0

:wq

Mount –a

Close the partition

Umount /test

Cryptsetup luksClose india

GUI