ASSIGNMENT -3   Q-1   Prithviraj Nikam
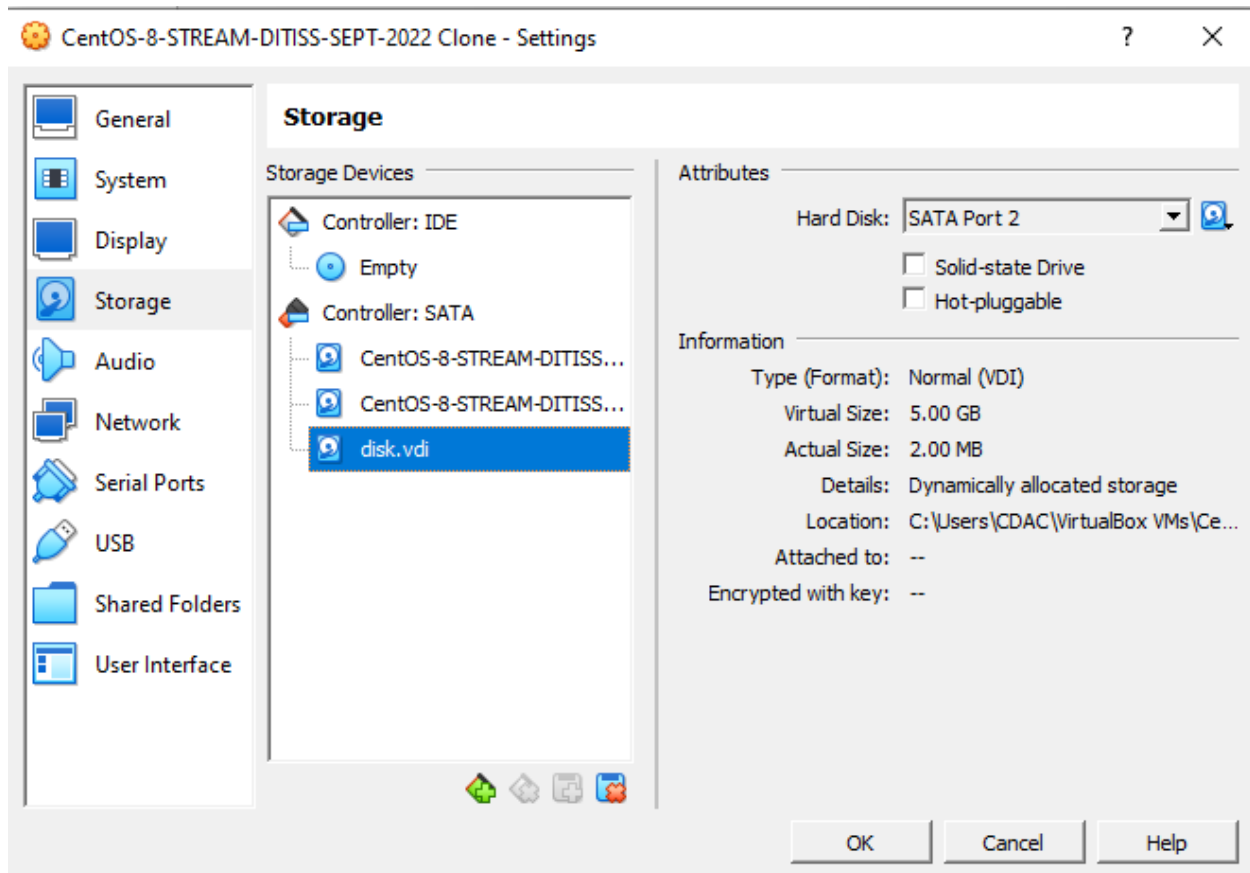
Step 1:- Create virtual disk size is 5GB.

Step 2:- open the cent os and boot it check new HDD

```
[root@localhost ~]# fdisk /dev/sdc

Welcome to fdisk (util-linux 2.32.1).
Changes will remain in memory only, until you decide to write them.
Be careful before using the write command.

Device does not contain a recognized partition table.
Created a new DOS disklabel with disk identifier 0x1e2fd8f6.

Command (m for help): n
Partition type
   p   primary (0 primary, 0 extended, 4 free)
   e   extended (container for logical partitions)
Select (default p): p
Partition number (1-4, default 1): 1
First sector (2048-10485759, default 2048):
Last sector, +sectors or +size{K,M,G,T,P} (2048-10485759, default 10485759): +2G

Created a new partition 1 of type 'Linux' and of size 2 GiB.

Command (m for help): █
```

Step 3:- create partition of newly added HDD

```
[root@localhost ~]# fdisk /dev/sdc

Welcome to fdisk (util-linux 2.32.1).
Changes will remain in memory only, until you decide to write them.
Be careful before using the write command.


Command (m for help): n
Partition type
   p   primary (1 primary, 0 extended, 3 free)
   e   extended (container for logical partitions)
Select (default p): p
Partition number (2-4, default 2): 2
First sector (4196352-10485759, default 4196352):
Last sector, +sectors or +size{K,M,G,T,P} (4196352-10485759, default 10485759):
+3G
Value out of range.
Last sector, +sectors or +size{K,M,G,T,P} (4196352-10485759, default 10485759):
+2G

Created a new partition 2 of type 'Linux' and of size 2 GiB.

Command (m for help): █
```

Step 4:- create a file system of that partition.

```
[root@localhost ~]# mkfs.ext4 /dev/sdc2
mke2fs 1.45.6 (20-Mar-2020)
Creating filesystem with 786176 4k blocks and 196608 inodes
Filesystem UUID: cb0e0c59-814c-4055-ba0e-6266a7d182bc
Superblock backups stored on blocks:
        32768, 98304, 163840, 229376, 294912

Allocating group tables: done
Writing inode tables: done
Creating journal (16384 blocks): done
Writing superblocks and filesystem accounting information: done

[root@localhost ~]#
```

```
[root@localhost ~]# mkfs.ext4 /dev/sdc1
mke2fs 1.45.6 (20-Mar-2020)
Creating filesystem with 524288 4k blocks and 131072 inodes
Filesystem UUID: f368b943-8a91-46ea-b444-970fc067e2a7
Superblock backups stored on blocks:
        32768, 98304, 163840, 229376, 294912

Allocating group tables: done
Writing inode tables: done
Creating journal (16384 blocks): done
Writing superblocks and filesystem accounting information: done

[root@localhost ~]#
```

Step 5:-mount the device

```
[root@localhost ~]# mount -t ext4 /dev/sdc1 /mnt/drive
[root@localhost ~]# mount -t ext4 /dev/sdc2 /mnt/drive
[root@localhost ~]# df -h
Filesystem          Size  Used Avail Use% Mounted on
devtmpfs            4.1G     0  4.1G   0% /dev
tmpfs               4.1G     0  4.1G   0% /dev/shm
tmpfs               4.1G  9.3M  4.1G   1% /run
tmpfs               4.1G     0  4.1G   0% /sys/fs/cgroup
/dev/mapper/cs-root  17G  5.9G   12G  35% /
/dev/sdb1           976M  2.6M  907M   1% /mnt/newdrive
/dev/sda1          1014M  254M  761M  26% /boot
tmpfs               830M   24K  830M   1% /run/user/0
/dev/sdc2           2.9G  9.0M  2.8G   1% /mnt/drive
[root@localhost ~]#
```

Step 6 :-check mounted device

```
[root@localhost ~]# cd /mnt/drive
[root@localhost drive]# touch abc
[root@localhost drive]# ls
abc   lost+found
[root@localhost drive]# touch akshit
[root@localhost drive]# ls
abc   akshit   lost+found
[root@localhost drive]#
```