ASSIGNMENT ON CSE 308 (CA1)

COURSE CODE : CSE 308

STUDENT NAME : SUJIT KUMAR

SUBMITTED ON : 26-03-21

SECTION :RK18QW (11804143) A27
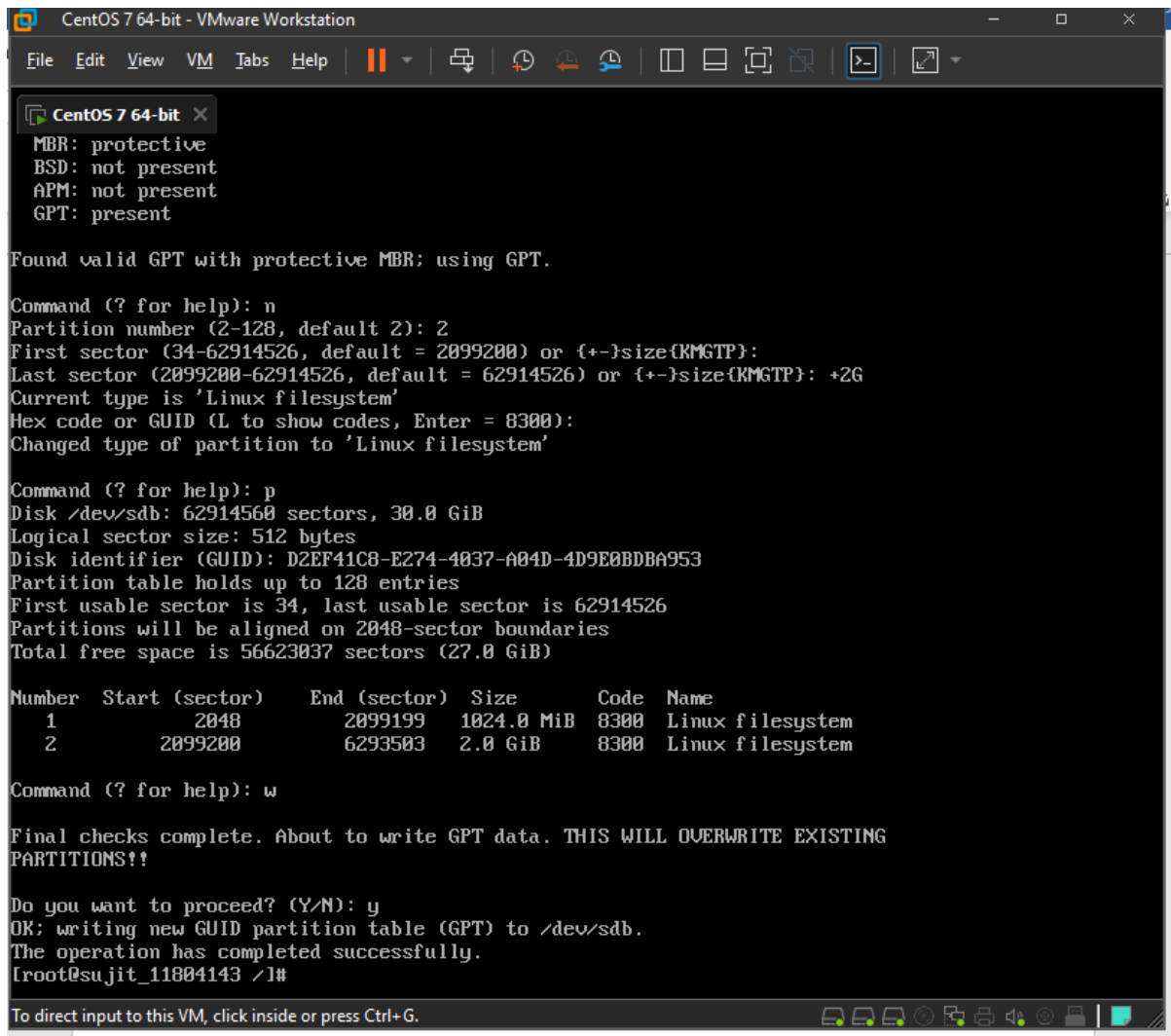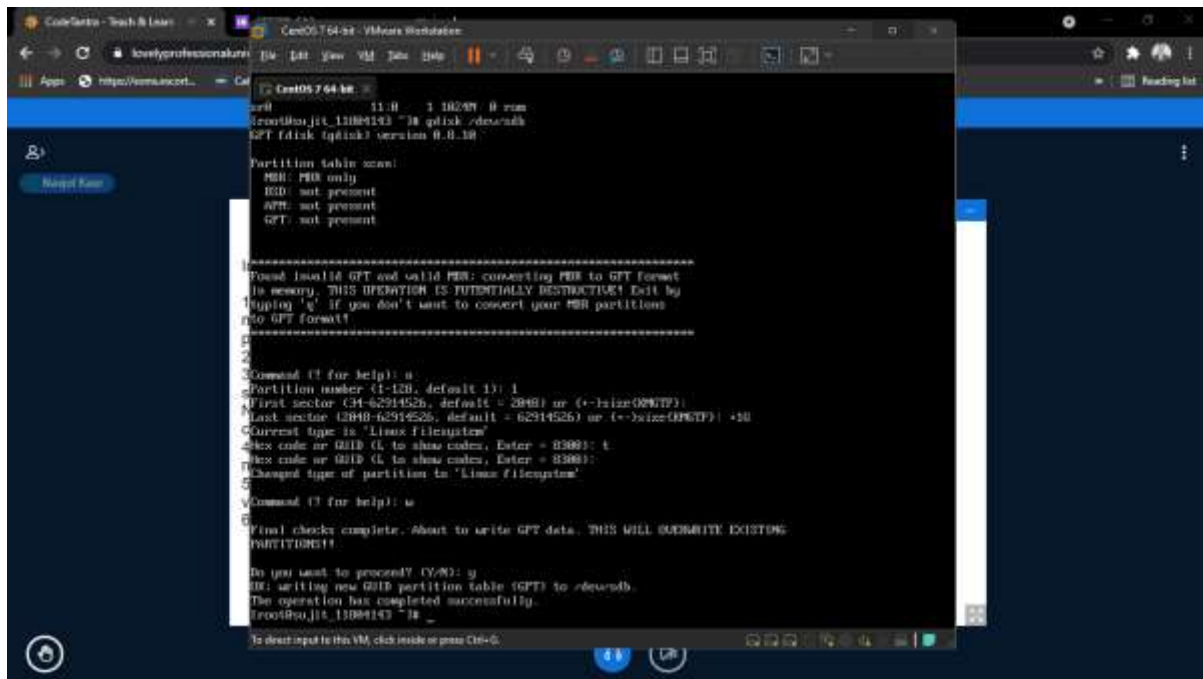
SUBMITTED TO: NAVJOT KAUR

DECLARATION STATEMENT

I hereby declare that the case study entitled "Assignment "submitted at Lovely Professional University, Phagwara, Punjab is an authentic work and has not been submitted elsewhere.

I understand that the work presented herewith is in direct compliance with Lovely Professional University's Policy on plagiarism, intellectual property rights, and highest standards of moral and ethical conduct. Therefore, to the best of my knowledge, the content of this case study represents authentic and honest effort conducted, in its entirety, by me. I am fully responsible for the contents of assignment.

Signature of Candidate
Sujit Kumar (A27)

```
 MBR: protective
 BSD: not present
 APM: not present
 GPT: present

Found valid GPT with protective MBR; using GPT.

Command (? for help): n
Partition number (2-128, default 2): 2
First sector (34-62914526, default = 2099200) or {+-}size{KMGTP}:
Last sector (2099200-62914526, default = 62914526) or {+-}size{KMGTP}: +2G
Current type is 'Linux filesystem'
Hex code or GUID (L to show codes, Enter = 8300):
Changed type of partition to 'Linux filesystem'

Command (? for help): p
Disk /dev/sdb: 62914560 sectors, 30.0 GiB
Logical sector size: 512 bytes
Disk identifier (GUID): D2EF41C8-E274-4037-A04D-4D9E0BDBA953
Partition table holds up to 128 entries
First usable sector is 34, last usable sector is 62914526
Partitions will be aligned on 2048-sector boundaries
Total free space is 56623037 sectors (27.0 GiB)

Number  Start (sector)    End (sector)  Size       Code  Name
   1           2048         2099199  1024.0 MiB   8300  Linux filesystem
   2        2099200         6293503  2.0 GiB      8300  Linux filesystem

Command (? for help): w

Final checks complete. About to write GPT data. THIS WILL OVERWRITE EXISTING
PARTITIONS!!

Do you want to proceed? (Y/N): y
OK; writing new GUID partition table (GPT) to /dev/sdb.
The operation has completed successfully.
[root@sujit_11804143 /]#
```

```
          ├─centos-root 253:0    0 46.2G  0 lvm  /
          └─centos-swap 253:1    0  2.8G  0 lvm  [SWAP]
sdb                     8:16    0   30G  0 disk
├─sdb1                  8:17    0    1G  0 part
└─sdb2                  8:18    0    2G  0 part
sdc                     8:32    0    2G  0 disk
└─sdc1                  8:33    0    1M  0 part
sr0                    11:0     1 1024M  0 rom
[root@sujit_11804143 /]# partprobe /dev/sdb
[root@sujit_11804143 /]# gdisk /dev/sdb
GPT fdisk (gdisk) version 0.8.10

Partition table scan:
  MBR: protective
  BSD: not present
  APM: not present
  GPT: present

Found valid GPT with protective MBR; using GPT.

Command (? for help): n
Partition number (3-128, default 3): 3
First sector (34-62914526, default = 6293504) or {+-}size{KMGTP}:
Last sector (6293504-62914526, default = 62914526) or {+-}size{KMGTP}: +1536M
Current type is 'Linux filesystem'
Hex code or GUID (L to show codes, Enter = 8300):
Changed type of partition to 'Linux filesystem'

Command (? for help): w

Final checks complete. About to write GPT data. THIS WILL OVERWRITE EXISTING
PARTITIONS!!

Do you want to proceed? (Y/N): y
OK; writing new GUID partition table (GPT) to /dev/sdb.
The operation has completed successfully.
[root@sujit_11804143 /]#
```

```
Found valid GPT with protective MBR; using GPT.

Command (? for help): n
Partition number (4-128, default 4): 4
First sector (34-62914526, default = 9439232) or {+-}size{KMGTP}:
Last sector (9439232-62914526, default = 62914526) or {+-}size{KMGTP}: +2060M
Current type is 'Linux filesystem'
Hex code or GUID (L to show codes, Enter = 8300):
Changed type of partition to 'Linux filesystem'

Command (? for help): t
Partition number (1-4): 4
Current type is 'Linux filesystem'
Hex code or GUID (L to show codes, Enter = 8300): L
0700 Microsoft basic data  0c01 Microsoft reserved   2700 Windows RE
3000 ONIE boot             3001 ONIE config          4100 PowerPC PReP boot
4200 Windows LDM data      4201 Windows LDM metadata  7501 IBM GPFS
7f00 ChromeOS kernel       7f01 ChromeOS root         7f02 ChromeOS reserved
8200 Linux swap            8300 Linux filesystem      8301 Linux reserved
8302 Linux /home           8400 Intel Rapid Start     8e00 Linux LVM
a500 FreeBSD disklabel     a501 FreeBSD boot          a502 FreeBSD swap
a503 FreeBSD UFS           a504 FreeBSD ZFS           a505 FreeBSD Vinum/RAID
a580 Midnight BSD data     a581 Midnight BSD boot     a582 Midnight BSD swap
a583 Midnight BSD UFS      a584 Midnight BSD ZFS      a585 Midnight BSD Vinum
a800 Apple UFS             a901 NetBSD swap           a902 NetBSD FFS
a903 NetBSD LFS            a904 NetBSD concatenated    a905 NetBSD encrypted
a906 NetBSD RAID           ab00 Apple boot            af00 Apple HFS/HFS+
af01 Apple RAID            af02 Apple RAID offline     af03 Apple label
af04 AppleTV recovery      af05 Apple Core Storage    be00 Solaris boot
bf00 Solaris root          bf01 Solaris /usr & Mac Z  bf02 Solaris swap
bf03 Solaris backup        bf04 Solaris /var          bf05 Solaris /home
bf06 Solaris alternate se  bf07 Solaris Reserved 1    bf08 Solaris Reserved 2
bf09 Solaris Reserved 3    bf0a Solaris Reserved 4    bf0b Solaris Reserved 5
c001 HP-UX data            c002 HP-UX service         ea00 Freedesktop $BOOT
eb00 Haiku BFS             ed00 Sony system partitio  ed01 Lenovo system partit
Press the <Enter> key to see more codes: _
```

```
0700 Microsoft basic data    0c01 Microsoft reserved    2700 Windows RE
3000 ONIE boot               3001 ONIE config           4100 PowerPC PReP boot
4200 Windows LDM data        4201 Windows LDM metadata   7501 IBM GPFS
7f00 ChromeOS kernel         7f01 ChromeOS root          7f02 ChromeOS reserved
8200 Linux swap              8300 Linux filesystem       8301 Linux reserved
8302 Linux /home             8400 Intel Rapid Start      8e00 Linux LVM
a500 FreeBSD disklabel       a501 FreeBSD boot           a502 FreeBSD swap
a503 FreeBSD UFS             a504 FreeBSD ZFS            a505 FreeBSD Vinum/RAID
a580 Midnight BSD data       a581 Midnight BSD boot      a582 Midnight BSD swap
a583 Midnight BSD UFS        a584 Midnight BSD ZFS       a585 Midnight BSD Vinum
a800 Apple UFS               a901 NetBSD swap            a902 NetBSD FFS
a903 NetBSD LFS              a904 NetBSD concatenated    a905 NetBSD encrypted
a906 NetBSD RAID             ab00 Apple boot             af00 Apple HFS/HFS+
af01 Apple RAID              af02 Apple RAID offline     af03 Apple label
af04 AppleTV recovery        af05 Apple Core Storage     be00 Solaris boot
bf00 Solaris root            bf01 Solaris /usr & Mac Z   bf02 Solaris swap
bf03 Solaris backup          bf04 Solaris /var           bf05 Solaris /home
bf06 Solaris alternate se    bf07 Solaris Reserved 1     bf08 Solaris Reserved 2
bf09 Solaris Reserved 3      bf0a Solaris Reserved 4     bf0b Solaris Reserved 5
c001 HP-UX data              c002 HP-UX service          ea00 Freedesktop $BOOT
eb00 Haiku BFS               ed00 Sony system partitio   ed01 Lenovo system partit
Press the <Enter> key to see more codes: 8300
ef00 EFI System             ef01 MBR partition scheme   ef02 BIOS boot partition
fb00 VMware VMFS             fb01 VMware reserved        fc00 VMware kcore crash p
fd00 Linux RAID
Hex code or GUID (L to show codes, Enter = 8300):
Changed type of partition to 'Linux filesystem'

Command (? for help): w

Final checks complete. About to write GPT data. THIS WILL OVERWRITE EXISTING
PARTITIONS!!

Do you want to proceed? (Y/N): y
OK; writing new GUID partition table (GPT) to /dev/sdb.
The operation has completed successfully.
[root@sujit_11804143 /]# _
```

```
 ─sda1              8:1    0    1G  0 part /boot
 ─sda2              8:2    0   49G  0 part
   ─centos-root 253:0    0 46.2G  0 lvm  /
   ─centos-swap 253:1    0  2.8G  0 lvm  [SWAP]
sdb                8:16   0   30G  0 disk
 ─sdb1             8:17   0    1G  0 part
 ─sdb2             8:18   0    2G  0 part
 ─sdb3             8:19   0  1.5G  0 part
 ─sdb4             8:20   0    2G  0 part
sdc                8:32   0    2G  0 disk
 ─sdc1             8:33   0    1M  0 part
sr0               11:0    1 1024M  0 rom
[root@sujit_11804143 /]# gdisk /dev/sdb
GPT fdisk (gdisk) version 0.8.10

Partition table scan:
  MBR: protective
  BSD: not present
  APM: not present
  GPT: present

Found valid GPT with protective MBR; using GPT.

Command (? for help): n
Partition number (5-128, default 5): 5
First sector (34-62914526, default = 13658112) or {+-}size{KMGTP}:
Last sector (13658112-62914526, default = 62914526) or {+-}size{KMGTP}: +3G
Current type is 'Linux filesystem'
Hex code or GUID (L to show codes, Enter = 8300):
Changed type of partition to 'Linux filesystem'

Command (? for help): w

Final checks complete. About to write GPT data. THIS WILL OVERWRITE EXISTING
PARTITIONS!!

Do you want to proceed? (Y/N):
```

```
─sda1              8:1    0    1G  0 part /boot
─sda2              8:2    0   49G  0 part
  ─centos-root   253:0    0 46.2G  0 lvm  /
  ─centos-swap   253:1    0  2.8G  0 lvm  [SWAP]
sdb                8:16   0   30G  0 disk
─sdb1              8:17   0    1G  0 part
─sdb2              8:18   0    2G  0 part
─sdb3              8:19   0  1.5G  0 part
─sdb4              8:20   0    2G  0 part
sdc                8:32   0    2G  0 disk
 ─sdc1             8:33   0    1M  0 part
sr0               11:0    1 1024M  0 rom
[root@sujit_11804143 /]# gdisk /dev/sdb
GPT fdisk (gdisk) version 0.8.10

Partition table scan:
  MBR: protective
  BSD: not present
  APM: not present
  GPT: present

Found valid GPT with protective MBR; using GPT.

Command (? for help): n
Partition number (5-128, default 5): 5
First sector (34-62914526, default = 13658112) or {+-}size{KMGTP}:
Last sector (13658112-62914526, default = 62914526) or {+-}size{KMGTP}: +3G
Current type is 'Linux filesystem'
Hex code or GUID (L to show codes, Enter = 8300):
Changed type of partition to 'Linux filesystem'

Command (? for help): w

Final checks complete. About to write GPT data. THIS WILL OVERWRITE EXISTING
PARTITIONS!!

Do you want to proceed? (Y/N):
```

File   Edit   View   VM   Tabs   Help

CentOS 7 64-bit ×

```
[root@sujit_11804143 /]# lsblk
NAME            MAJ:MIN RM   SIZE RO TYPE MOUNTPOINT
sda               8:0    0    50G  0 disk
├─sda1            8:1    0     1G  0 part /boot
└─sda2            8:2    0    49G  0 part
  ├─centos-root 253:0    0  46.2G  0 lvm  /
  └─centos-swap 253:1    0   2.8G  0 lvm  [SWAP]
sdb               8:16   0    30G  0 disk
├─sdb1            8:17   0     1G  0 part
├─sdb2            8:18   0     2G  0 part
├─sdb3            8:19   0   1.5G  0 part
├─sdb4            8:20   0     2G  0 part
└─sdb5            8:21   0     3G  0 part
sdc               8:32   0     2G  0 disk
└─sdc1            8:33   0     1M  0 part
sr0              11:0    1  1024M  0 rom
[root@sujit_11804143 /]#
```

File   Edit   View   Bookmarks   Settings   Help

```
[root@sujit_11804143 /]# mkfs.ext4 /dev ]/sdb3
mke2fs 1.42.9 (28-Dec-2013)
mkfs.ext4: invalid blocks ']/sdb3' on device '/dev'
[root@sujit_11804143 /]# mkfs.ext4 /dev/sdb3
mke2fs 1.42.9 (28-Dec-2013)
Filesystem label=
OS type: Linux
Block size=4096 (log=2)
Fragment size=4096 (log=2)
Stride=0 blocks, Stripe width=0 blocks
98304 inodes, 393216 blocks
19660 blocks (5.00%) reserved for the super user
First data block=0
Maximum filesystem blocks=402653184
12 block groups
32768 blocks per group, 32768 fragments per group
8192 inodes per group
Superblock backups stored on blocks:
        32768, 98304, 163840, 229376, 294912

Allocating group tables: done
Writing inode tables: done
Creating journal (8192 blocks): done
Writing superblocks and filesystem accounting information: done

[root@sujit_11804143 /]# mount PARTUUID="1d4f1711-d26f-49a4-b4a6-d1bdb
89dcf0e" /camount
```

suijit : bash

```
root@sujit_11804143 /]# mkfs.ext4 /dev/]/sdb3
nke2fs 1.42.9 (28-Dec-2013)
nkfs.ext4: invalid blocks ']/sdb3' on device '/dev'
[root@sujit_11804143 /]# mkfs.ext4 /dev/sdb3
nke2fs 1.42.9 (28-Dec-2013)
Filesystem label=
OS type: Linux
Block size=4096 (log=2)
Fragment size=4096 (log=2)
Stride=0 blocks, Stripe width=0 blocks
98304 inodes, 393216 blocks
19660 blocks (5.00%) reserved for the super user
First data block=0
Maximum filesystem blocks=402653184
12 block groups
32768 blocks per group, 32768 fragments per group
8192 inodes per group
Superblock backups stored on blocks:
        32768, 98304, 163840, 229376, 294912

Allocating group tables: done
Writing inode tables: done
Creating journal (8192 blocks): done
Writing superblocks and filesystem accounting information: done

[root@sujit_11804143 /]# mount PARTUUID="1d4f1711-d26f-49a4-b4a6-d1bdb
89dcf0e" /camount
[root@sujit_11804143 /]# █
```

File   Edit   View   Bookmarks   Settings   Help

```
#
# /etc/fstab
# Created by anaconda on Mon Jan 11 10:24:25 2021
#
# Accessible filesystems, by reference, are maintained under '/dev/dis
k'
# See man pages fstab(5), findfs(8), mount(8) and/or blkid(8) for more
 info
#
/dev/mapper/centos-root /                         xfs     defaults
  0 0
UUID=139dbf21-87ea-4764-b1df-652c01c918aa /boot                   xfs
    defaults        0 0
/dev/mapper/centos-swap swap                      swap    defaults
  0 0

UUID=1d4f1711-d26f-49a4-b4a6-d1bdb89dcf0e /camount ext4 defaults 0 0
~
~
~
~
~
~
~
~
~
-- INSERT --
```