**Software RAID Configuration and Testing**

Create partition /dev/sdb2, /dev/sdb3 and /dev/sdb4 (size 2 GB)

**Require Packages**

#yum install mdadm

**Create Raid-0**

mdadm --create /dev/md0 --level=0 --raid-devices=2 /dev/sdb2 /dev/sdb3

**Create Raid-1**

mdadm --create /dev/md0 --level=1 --raid-devices=2 /dev/sdb2 /dev/sdb3

**Create Raid-5**

mdadm --create /dev/md0 --level=5 --raid-devices=3 /dev/sdb2 /dev/sdb3 /dev/sdb4

**Formating**

mkfs.ext4 /dev/md1

mdadm –detail /dev/md1

**Mounting**

**Make drive faulty**

To fail the partitions we issue the following command:

mdadm --manage /dev/md0 --fail /dev/sdb3

Adding

To add the partitions we issue the following command:

mdadm --manage /dev/md0 --add /dev/sdb3

Removing

To remove the partitions from the RAID array:   
# mdadm --manage /dev/md0 --remove /dev/sdb3

**Note: if you add less size of disk you will get below error (original partition size 500M and try to adding 400M)**

**mdadm --manage /dev/md0 --add /dev/sdb7**

**mdadm: /dev/sdb7 not large enough to join array**

**But if you add more size of disk from original one then it will accept**

**mdadm --manage /dev/md0 --add /dev/sdb7**

**mdadm: /dev/sdb7 not large enough to join array**

after adding it will rebuild you may check from

mdadm --detail /dev/md0

and in /var/log/messages

Check Software RAID Status

mdadm --detail /dev/md0

cat /proc/mdadm

**removing raid**

mdadm --stop /dev/md1