

# INSTALLING UBUNTU WITH SOFTWARE RAID0

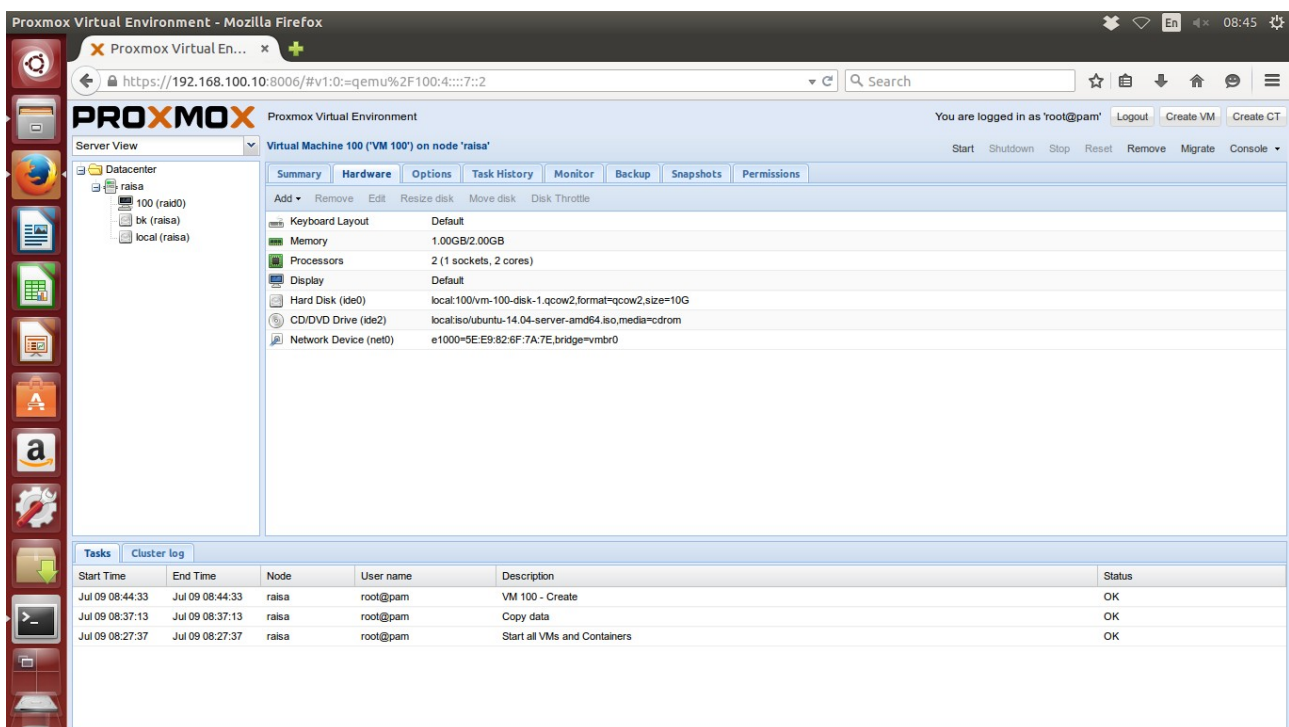
Note : Contoh instalasi dilakukan di proxmox ve.

Untuk set Raid0 Disk Striping > 2 hdd (config di sesuaikan).

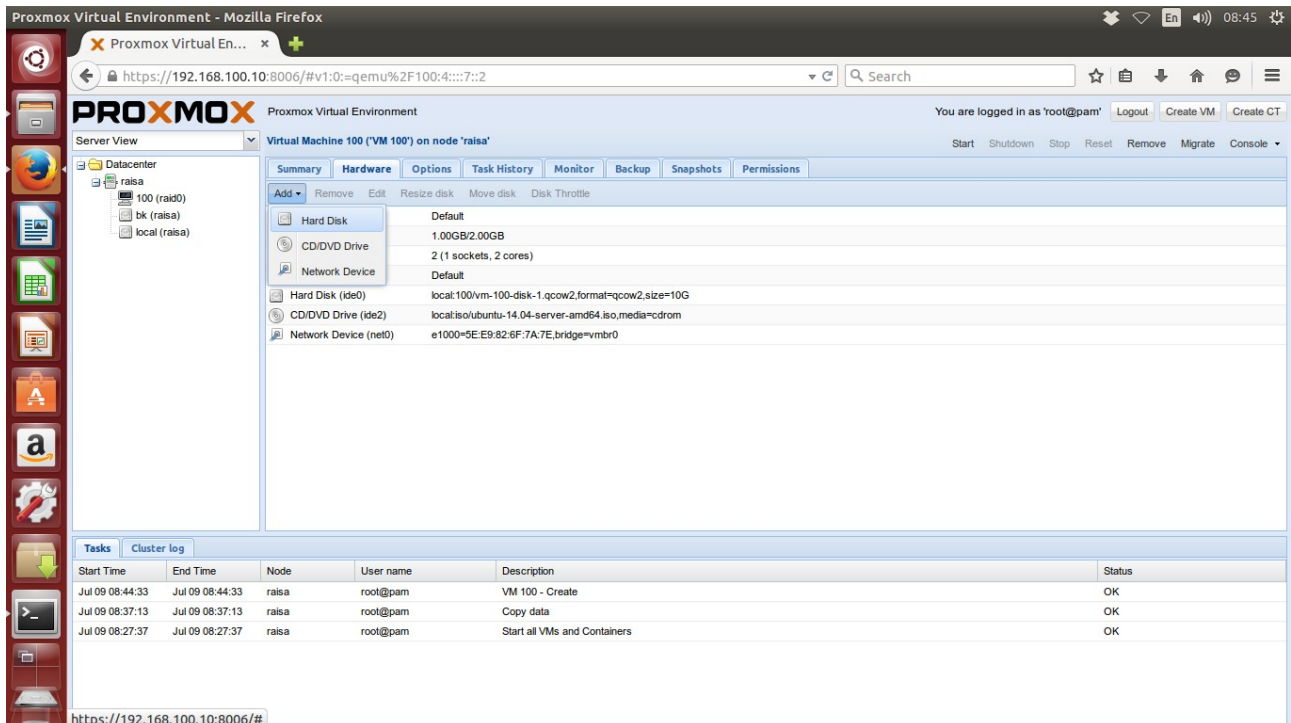
Kelebihan : menyatukan space hdd (2x10GB = 20GB)

Kekurangan : jika salah satu hdd rusak, data di hdd yg lain corrupt.

1. buat satu vm ubuntu.



2. pada bagian hardware tambahkan 1 hardisk dengan config yg sama.



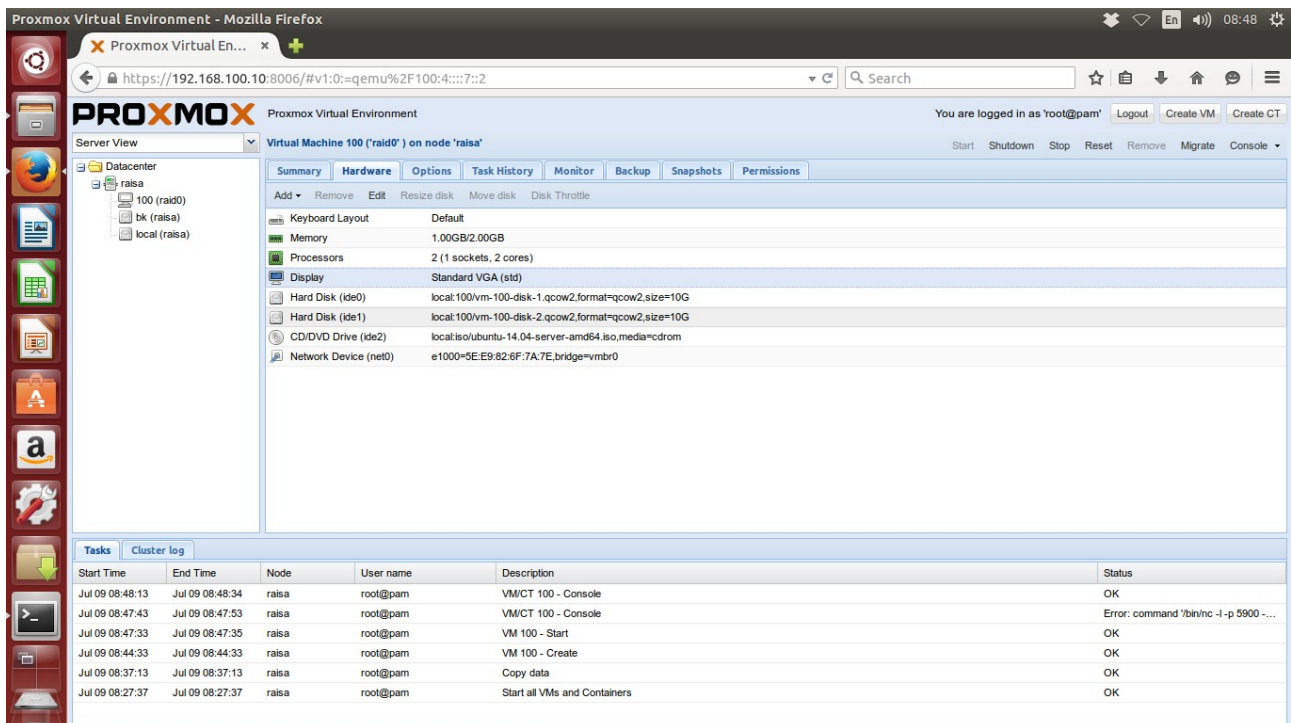
The screenshot shows the Proxmox Virtual Environment interface in Mozilla Firefox. The 'Hardware' tab is selected for 'Virtual Machine 100 (VM 100)' on node 'raisa'. The hardware configuration table is as follows:

Device	Configuration
Hard Disk	Default
CD/DVD Drive	1.00GB/2.00GB
Network Device	2 (1 sockets, 2 cores)
Hard Disk (ide0)	local:100/vm-100-disk-1.qcow2,format=qcow2,size=10G
CD/DVD Drive (ide2)	local:iso/ubuntu-14.04-server-amd64.iso,media=cdrom
Network Device (net0)	e1000=5E:E9:82:6F:7A:7E,bridge=vbr0

The 'Tasks' table at the bottom shows the following entries:

Start Time	End Time	Node	User name	Description	Status
Jul 09 08:44:33	Jul 09 08:44:33	raisa	root@pam	VM 100 - Create	OK
Jul 09 08:37:13	Jul 09 08:37:13	raisa	root@pam	Copy data	OK
Jul 09 08:27:37	Jul 09 08:27:37	raisa	root@pam	Start all VMs and Containers	OK

3. sehingga vm ubuntu memiliki 2 hdd yg identik (pada contoh ada 2x10GB).



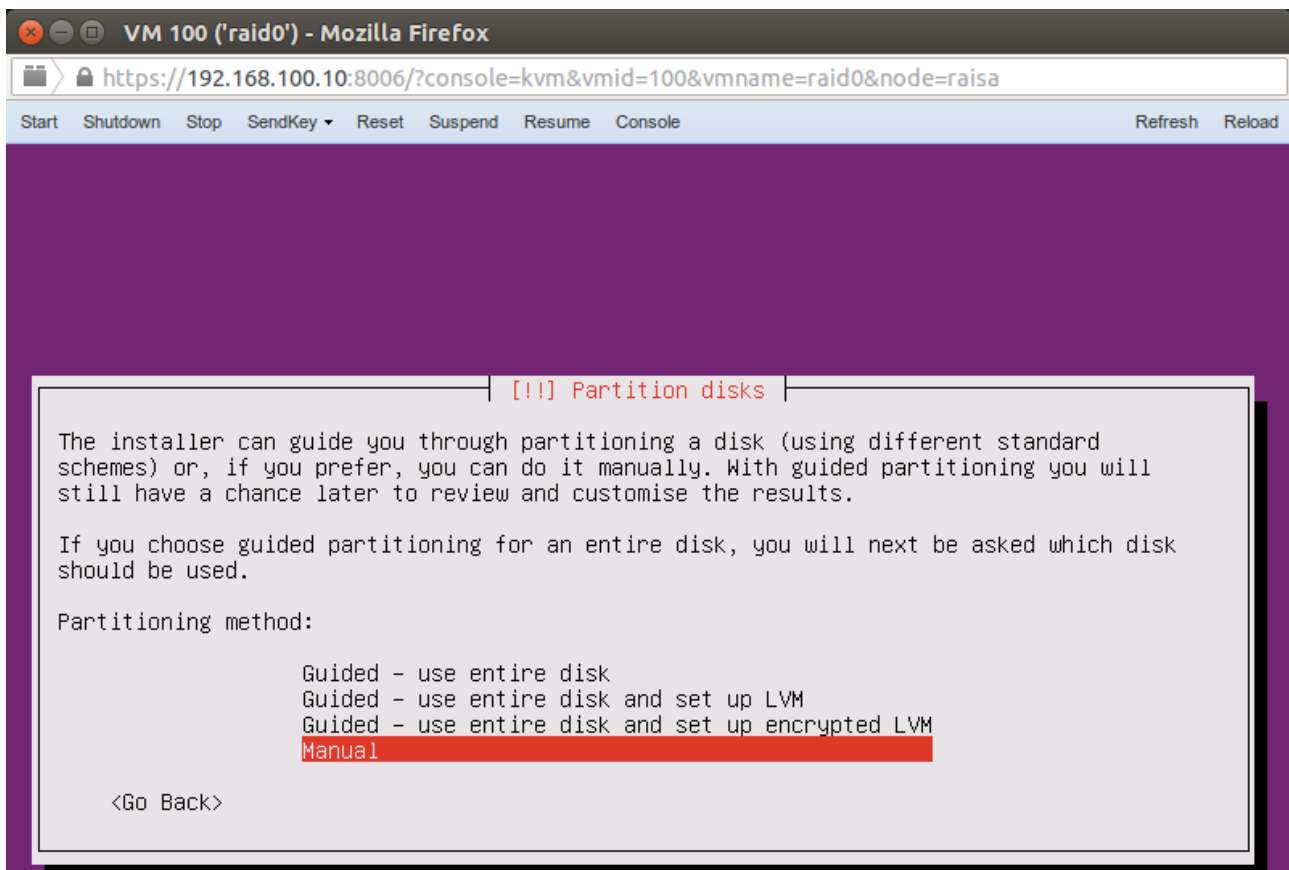
The screenshot shows the Proxmox Virtual Environment interface in Mozilla Firefox. The 'Hardware' tab is selected for 'Virtual Machine 100 (VM 100)' on node 'raisa'. The hardware configuration table is as follows:

Device	Configuration
Keyboard Layout	Default
Memory	1.00GB/2.00GB
Processors	2 (1 sockets, 2 cores)
Display	Standard VGA (std)
Hard Disk (ide0)	local:100/vm-100-disk-1.qcow2,format=qcow2,size=10G
Hard Disk (ide1)	local:100/vm-100-disk-2.qcow2,format=qcow2,size=10G
CD/DVD Drive (ide2)	local:iso/ubuntu-14.04-server-amd64.iso,media=cdrom
Network Device (net0)	e1000=5E:E9:82:6F:7A:7E,bridge=vbr0

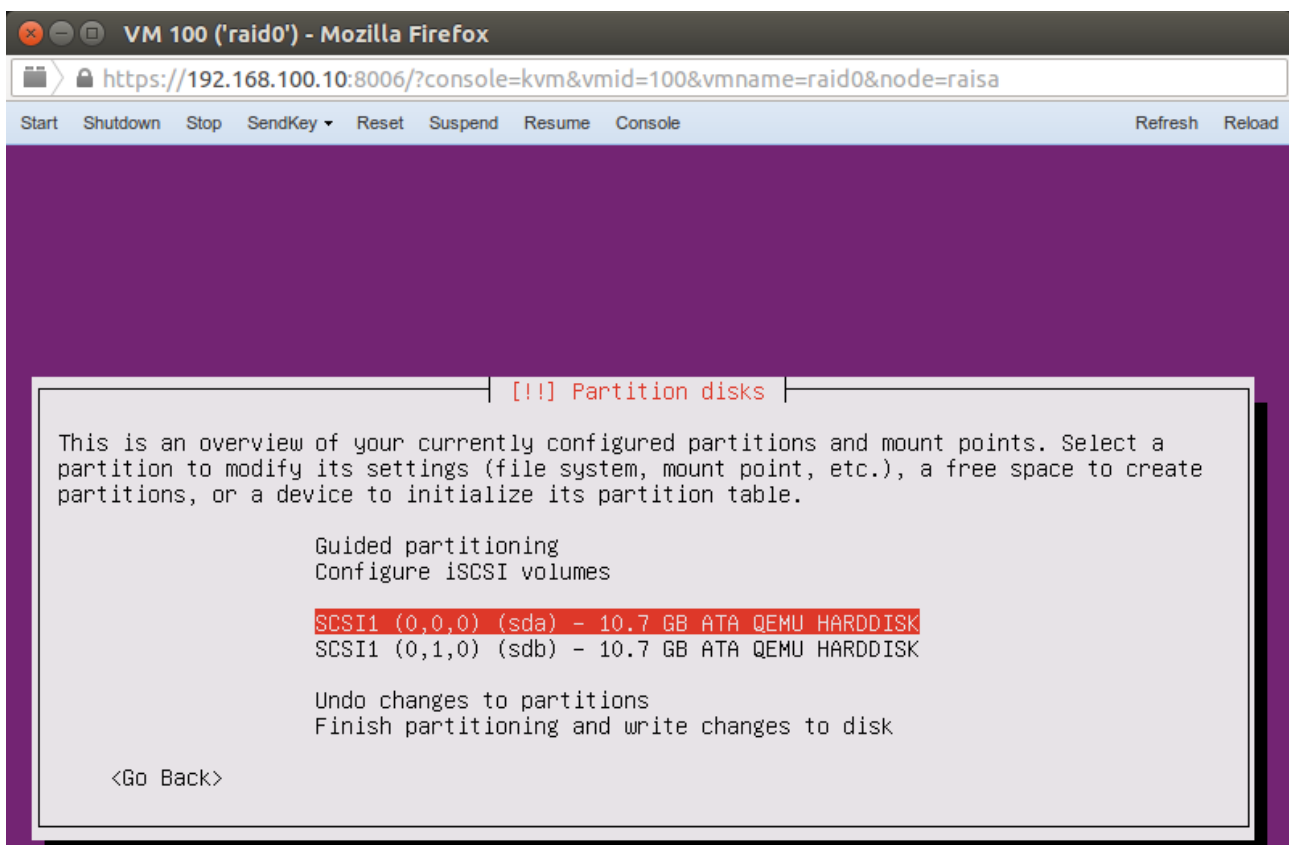
The 'Tasks' table at the bottom shows the following entries:

Start Time	End Time	Node	User name	Description	Status
Jul 09 08:48:13	Jul 09 08:48:34	raisa	root@pam	VM/CT 100 - Console	OK
Jul 09 08:47:43	Jul 09 08:47:53	raisa	root@pam	VM/CT 100 - Console	Error: command 'bin/hc -l -p 5900 -...
Jul 09 08:47:33	Jul 09 08:47:35	raisa	root@pam	VM 100 - Start	OK
Jul 09 08:44:33	Jul 09 08:44:33	raisa	root@pam	VM 100 - Create	OK
Jul 09 08:37:13	Jul 09 08:37:13	raisa	root@pam	Copy data	OK
Jul 09 08:27:37	Jul 09 08:27:37	raisa	root@pam	Start all VMs and Containers	OK

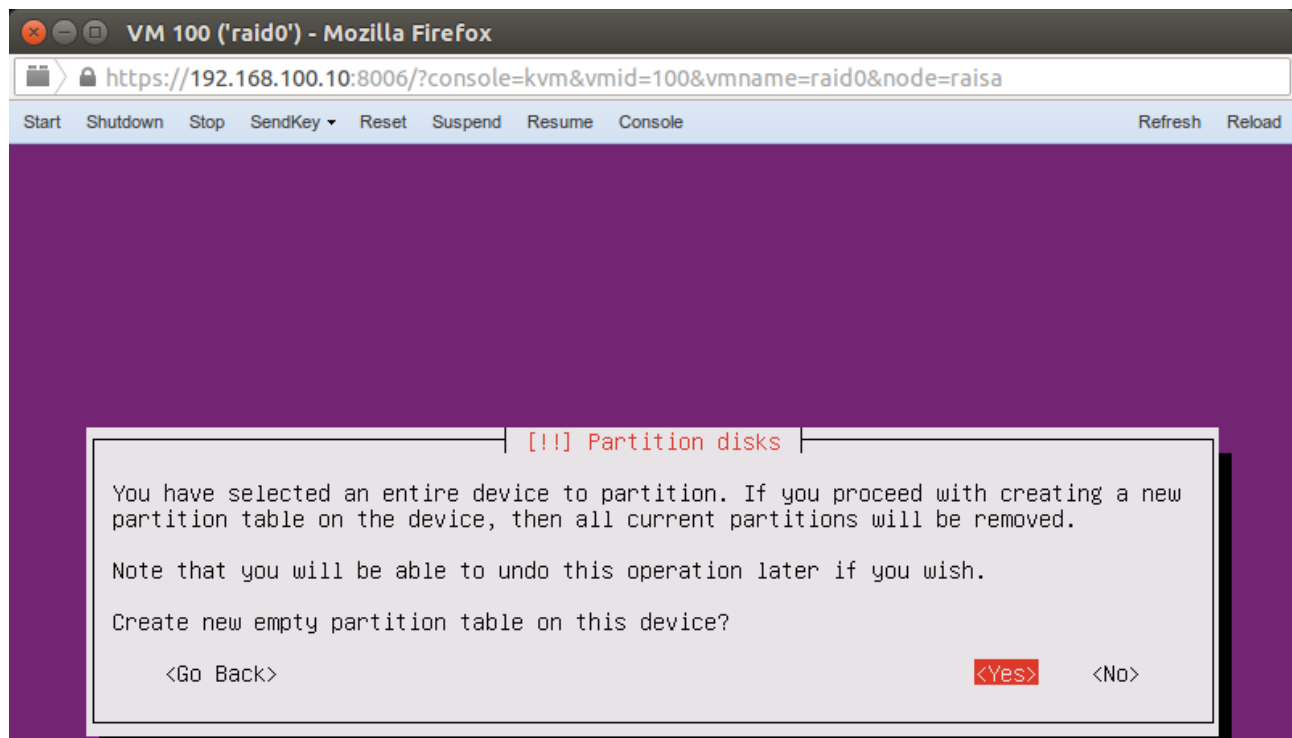
4. install ubuntu seperti biasa, sampai pada bagian partisi pilih manual.



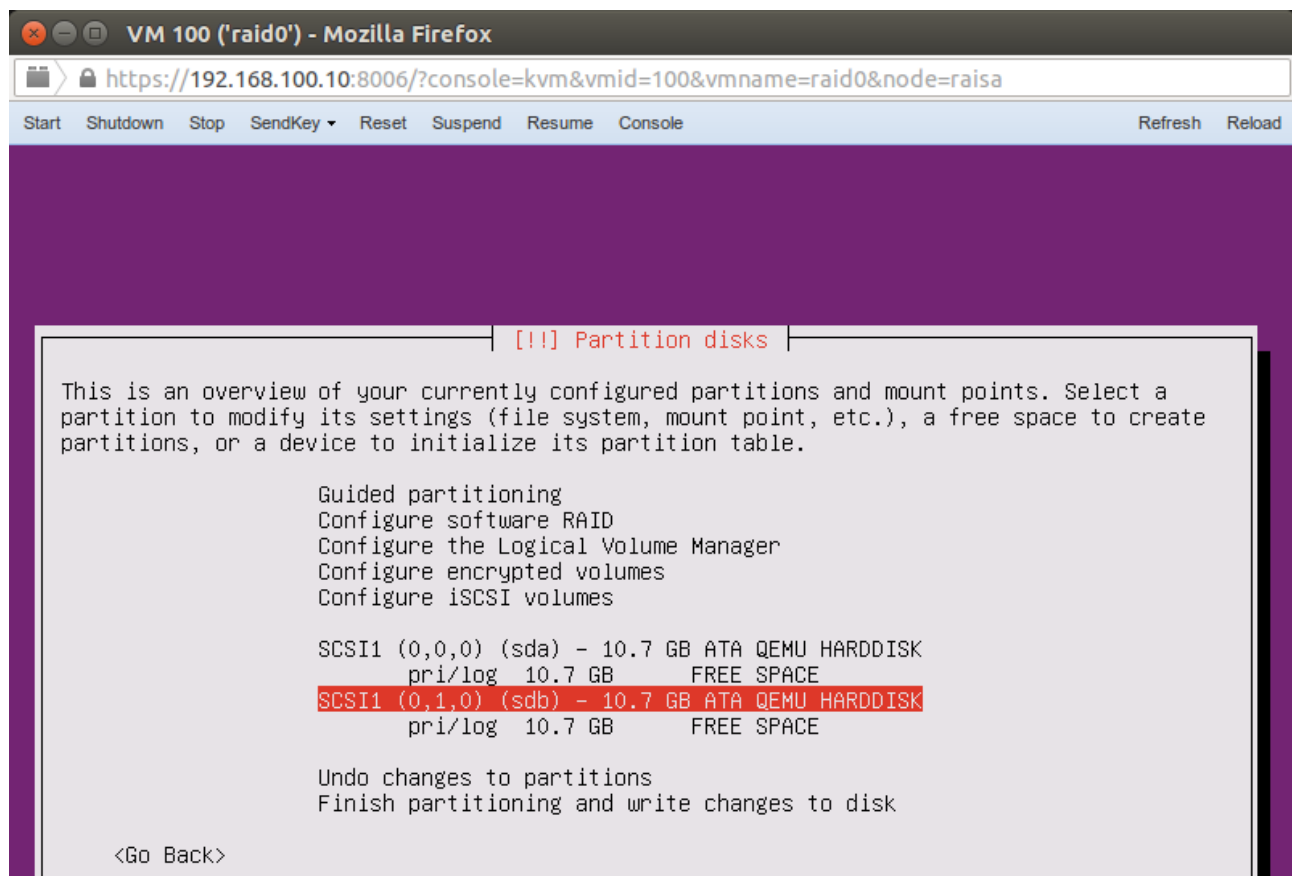
5. pada hdd 1.



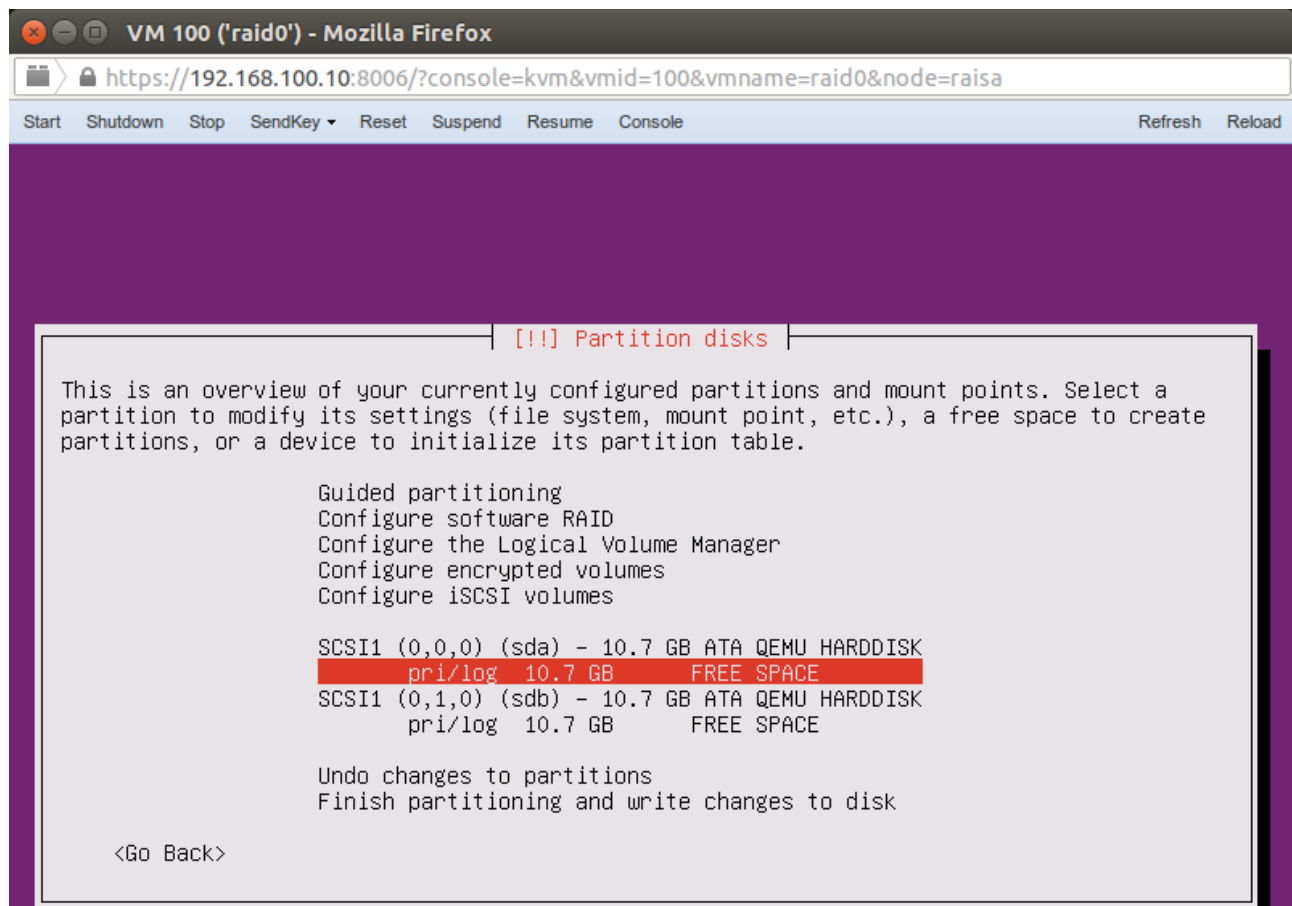
## 6. buat tabel partisi baru.



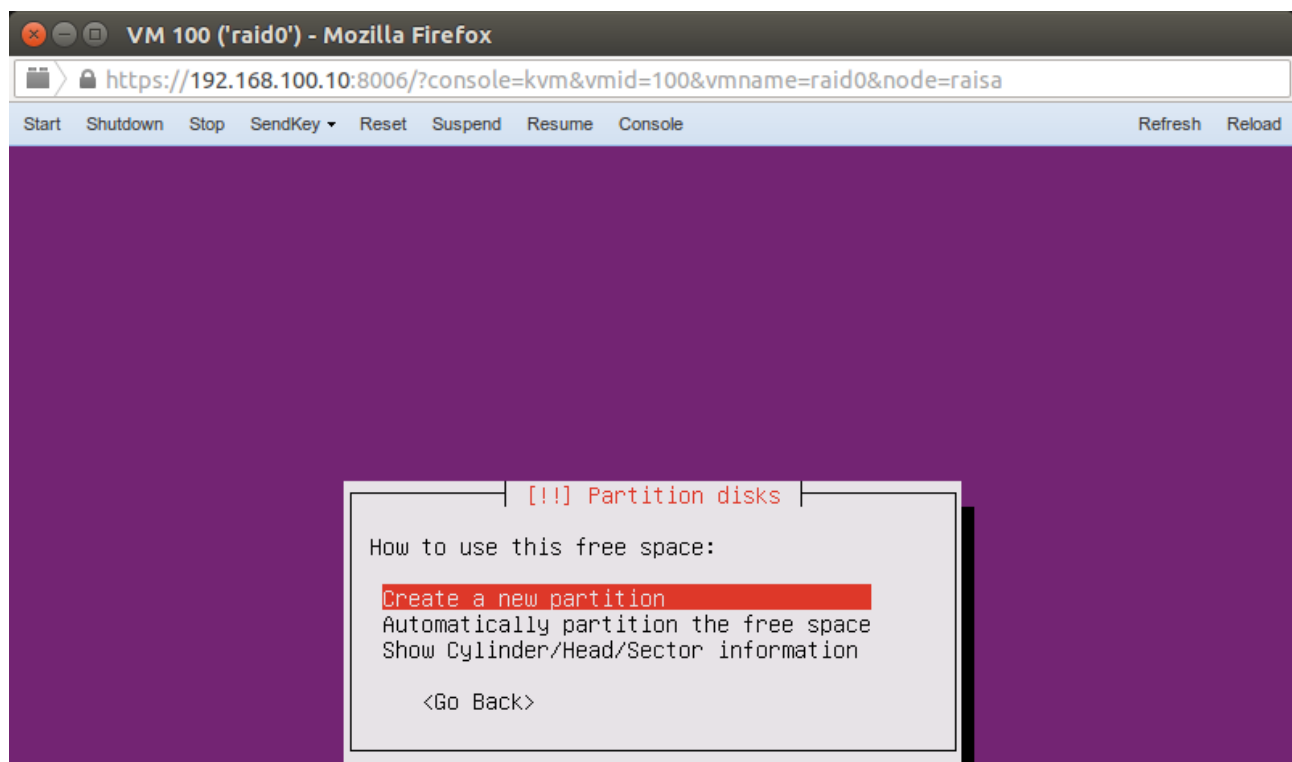
## 7. lakukan hal yg sama pada hdd2.



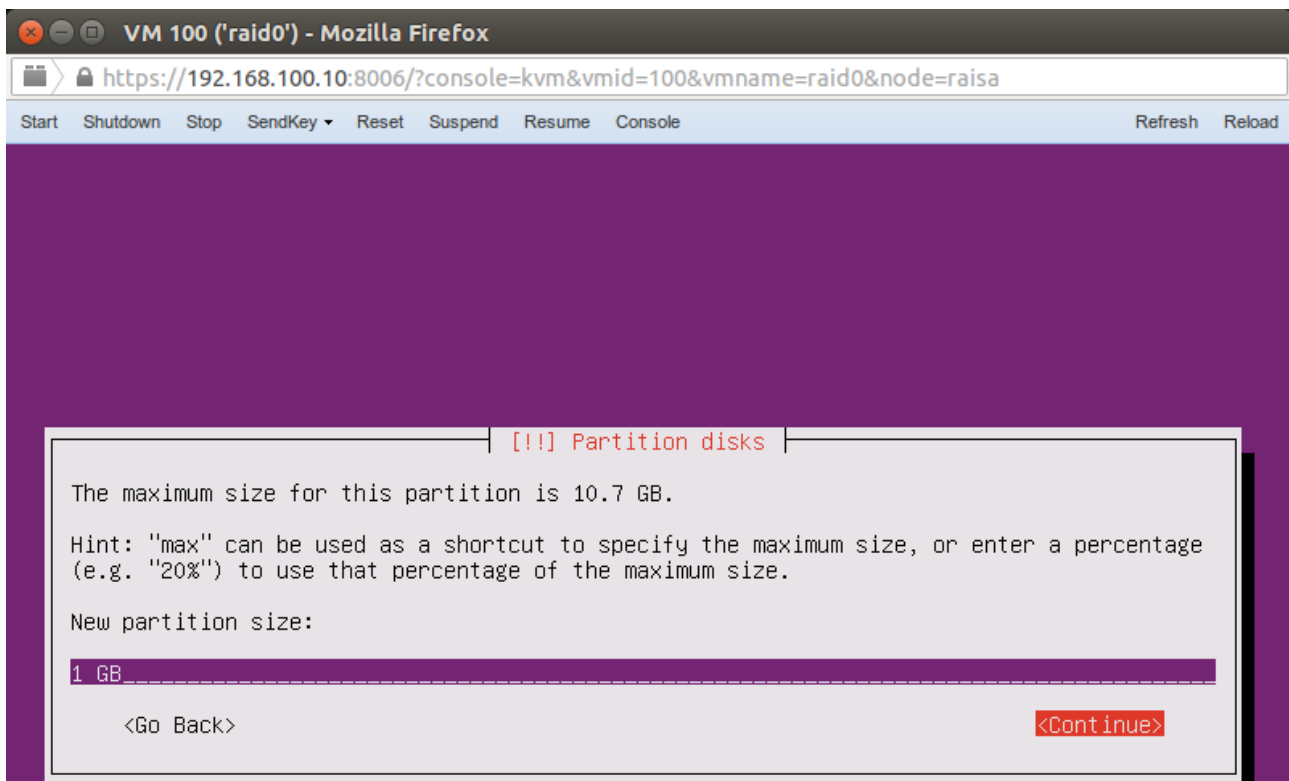
## 8. pada free space hdd1.



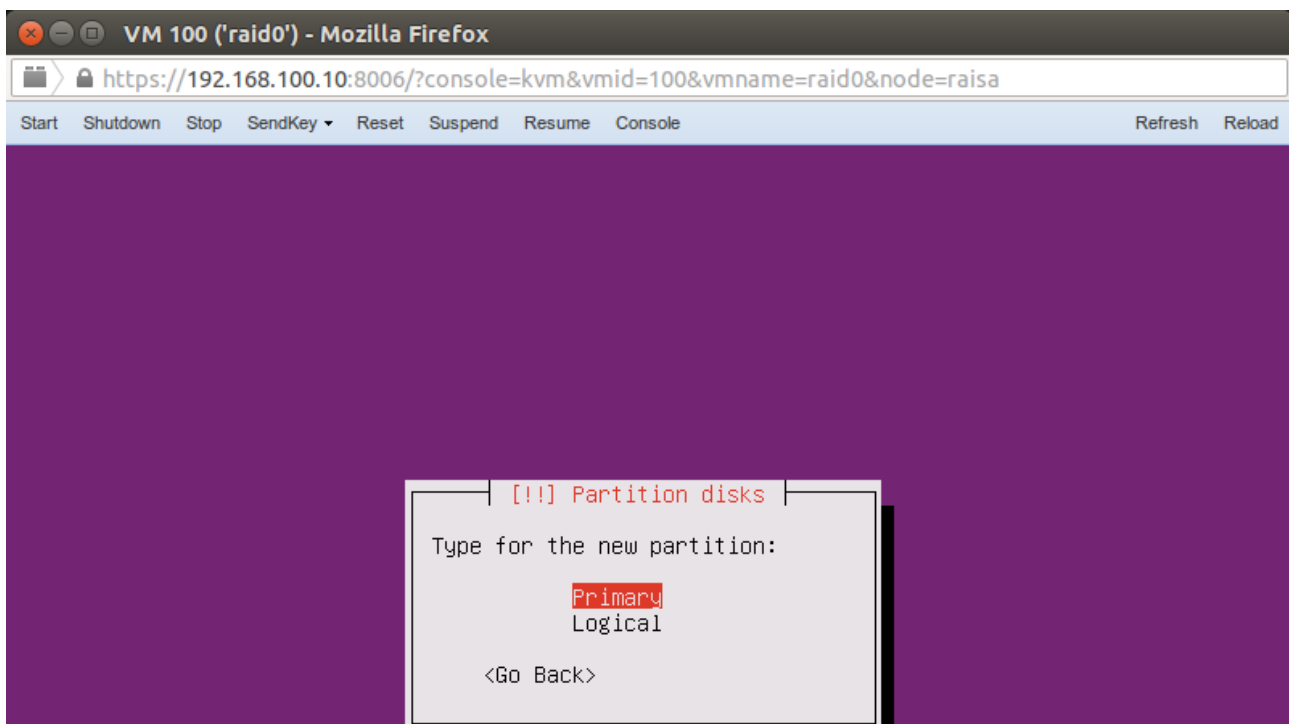
## 9. buat partisi baru.



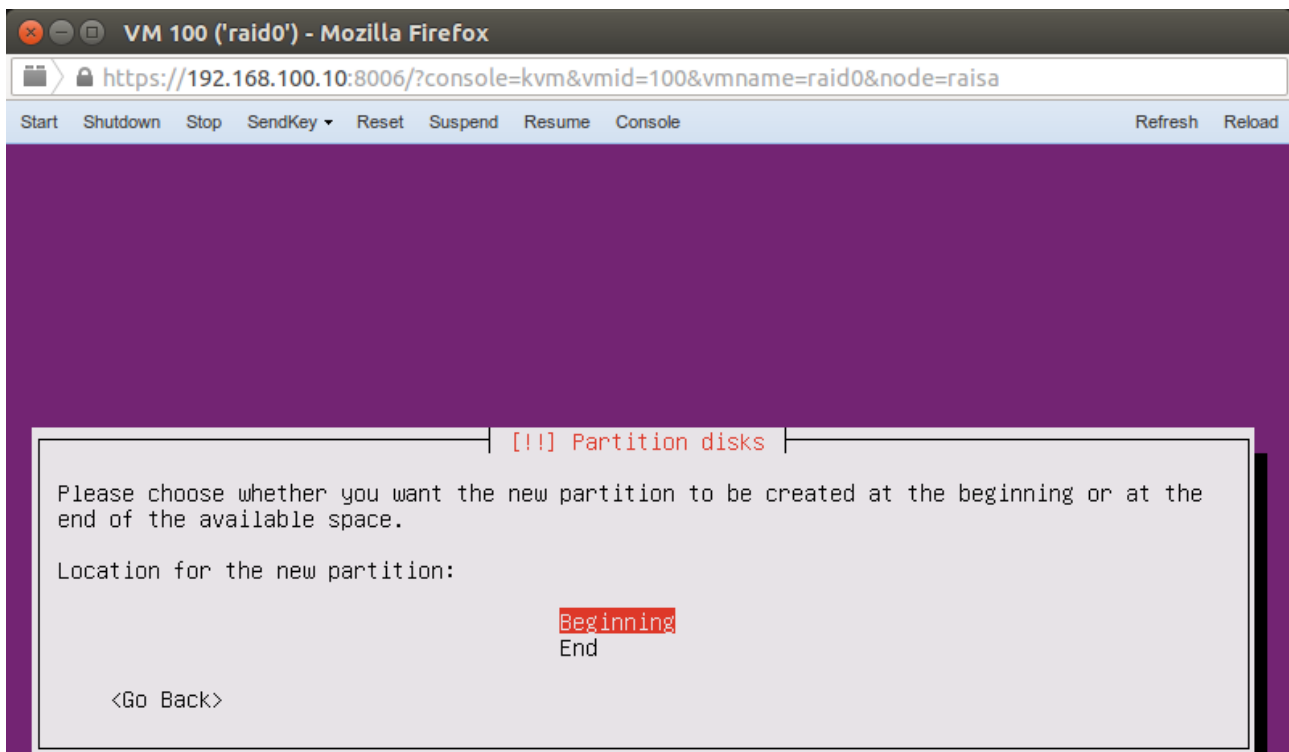
10. isi space 1 GB.



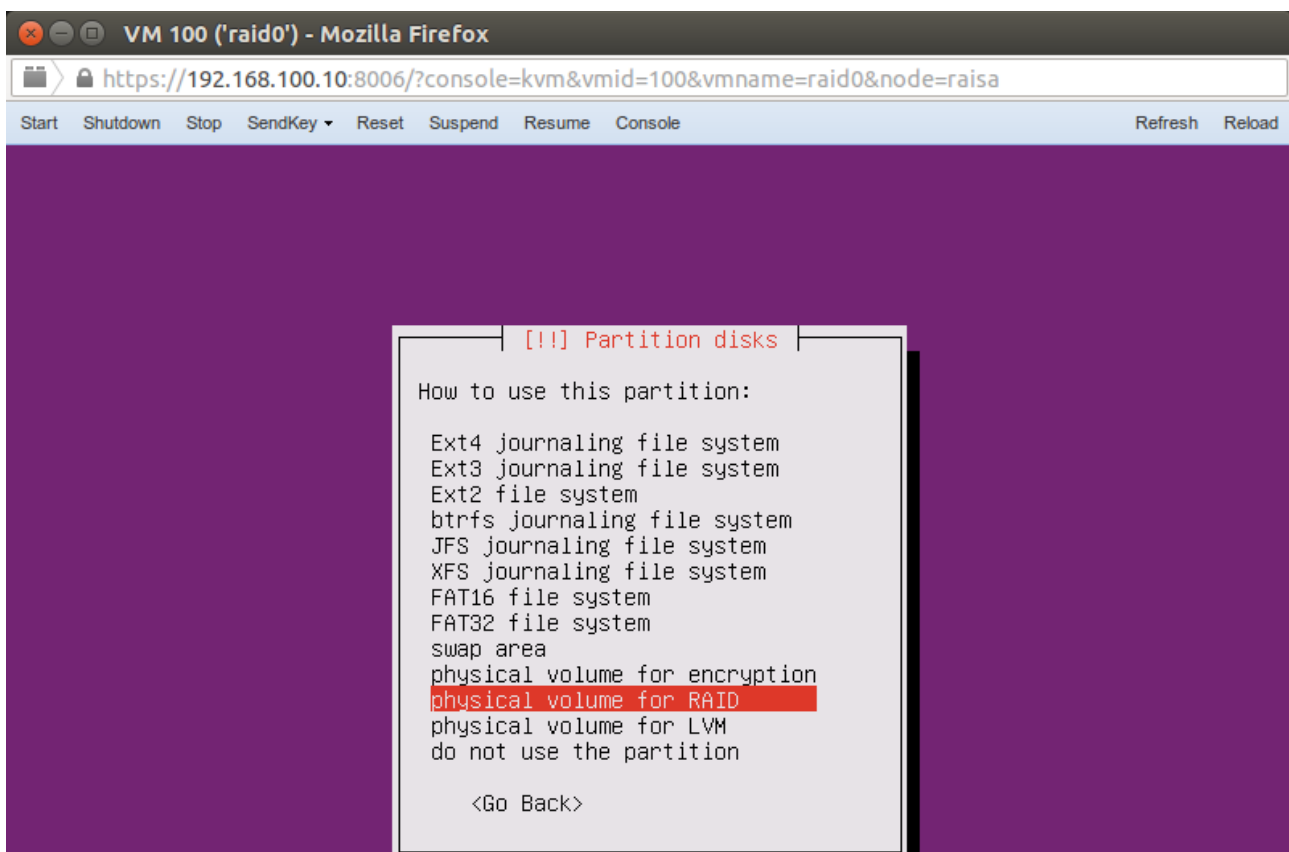
11. set tipe partisi primary.



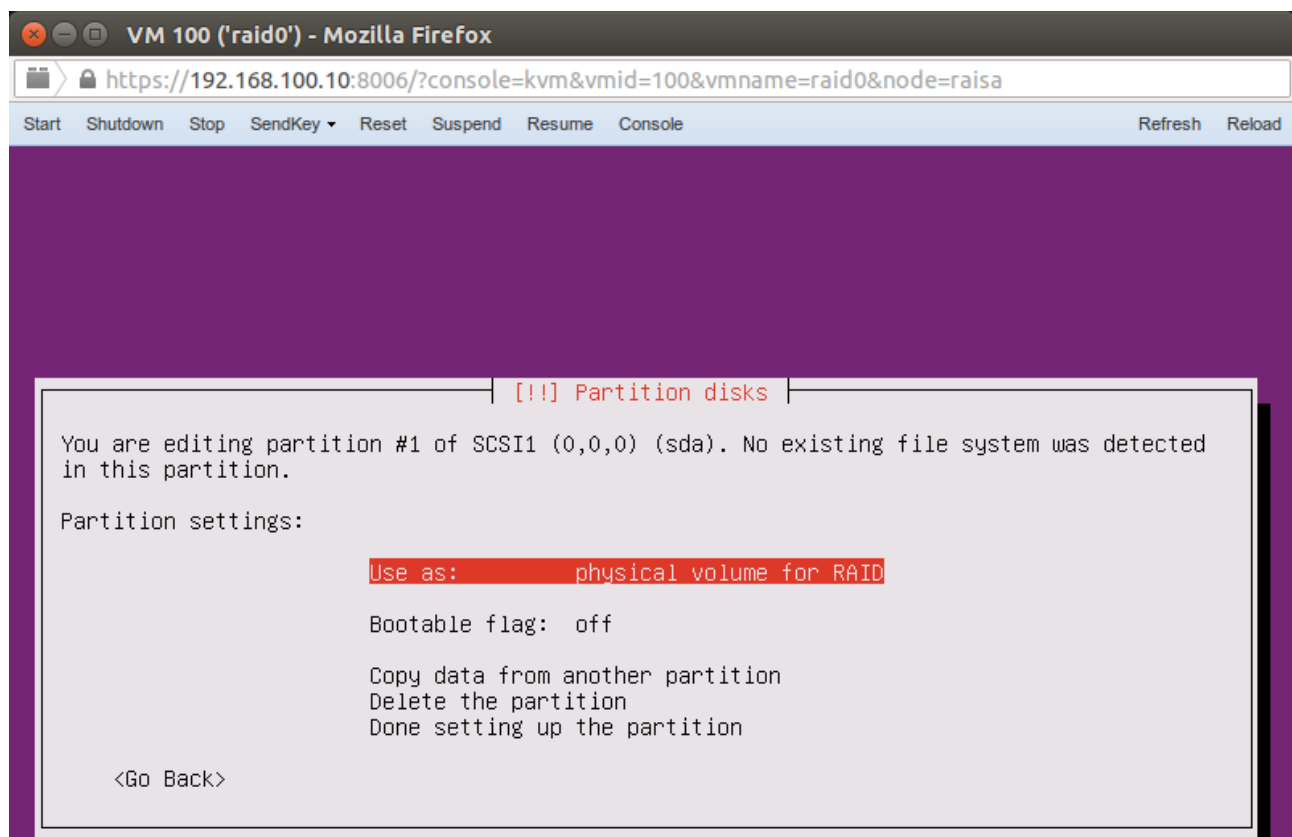
12. next set beginning.



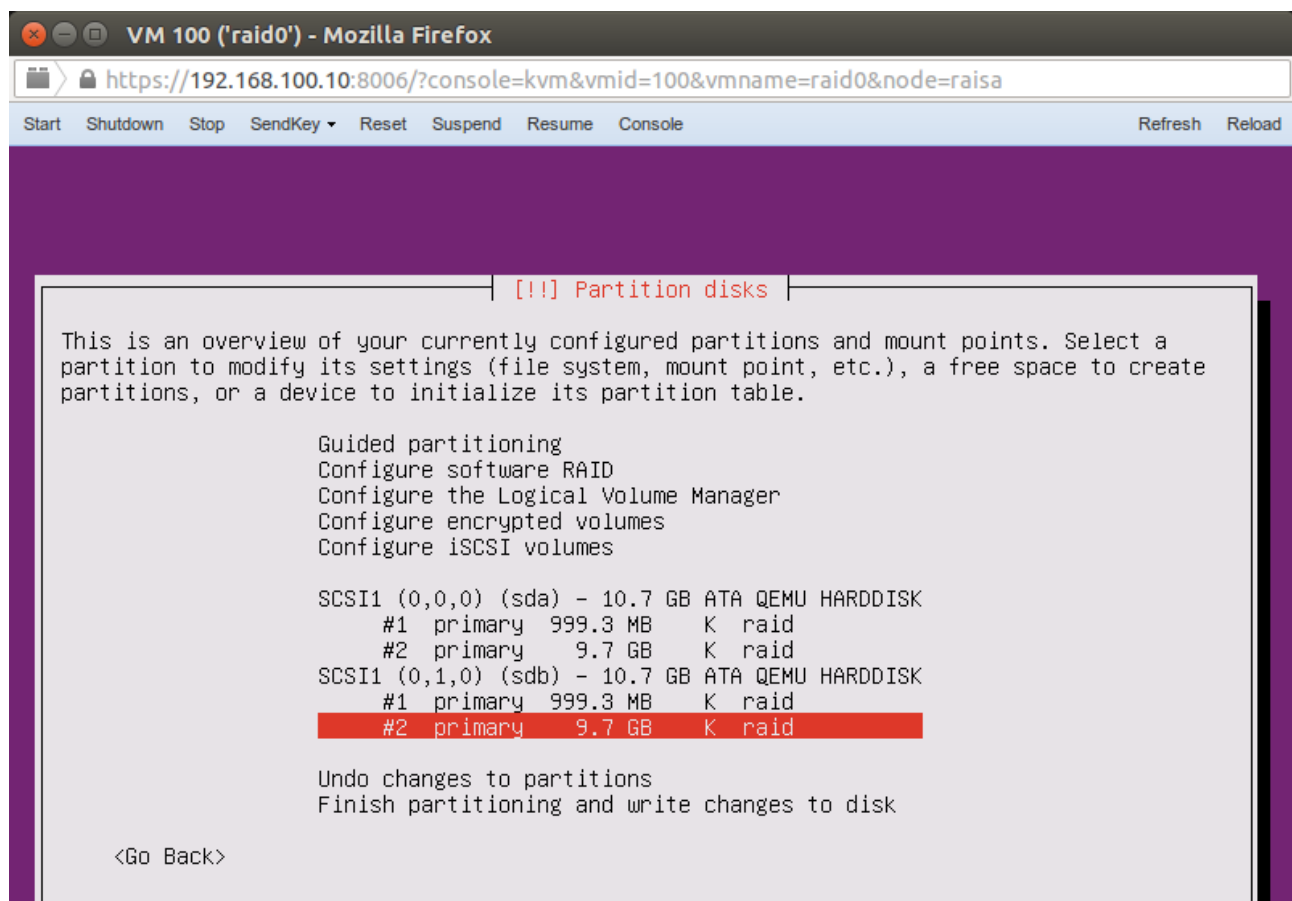
13. set tipe partisi for RAID.



14. done.

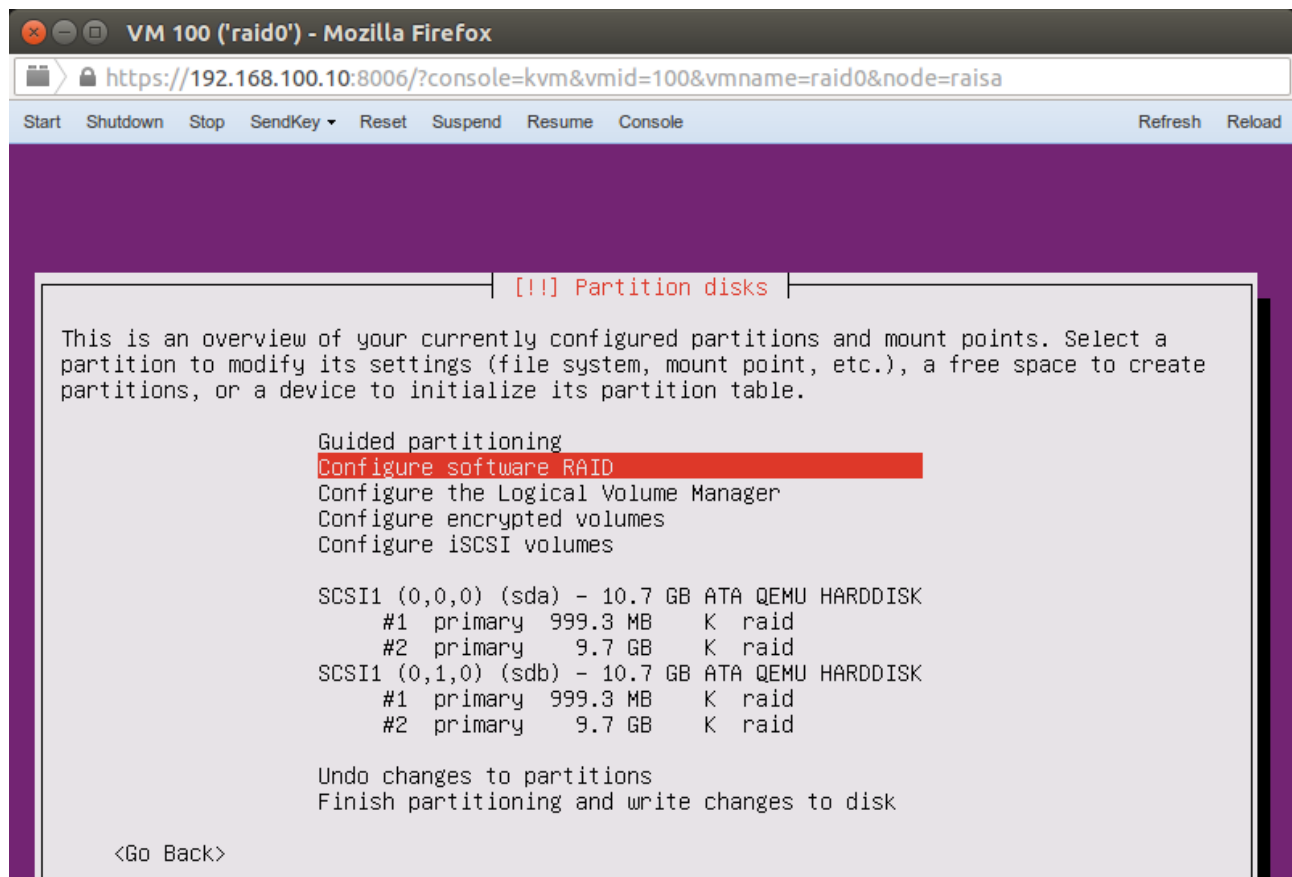


15. set sehingga seperti gambar di bawah.

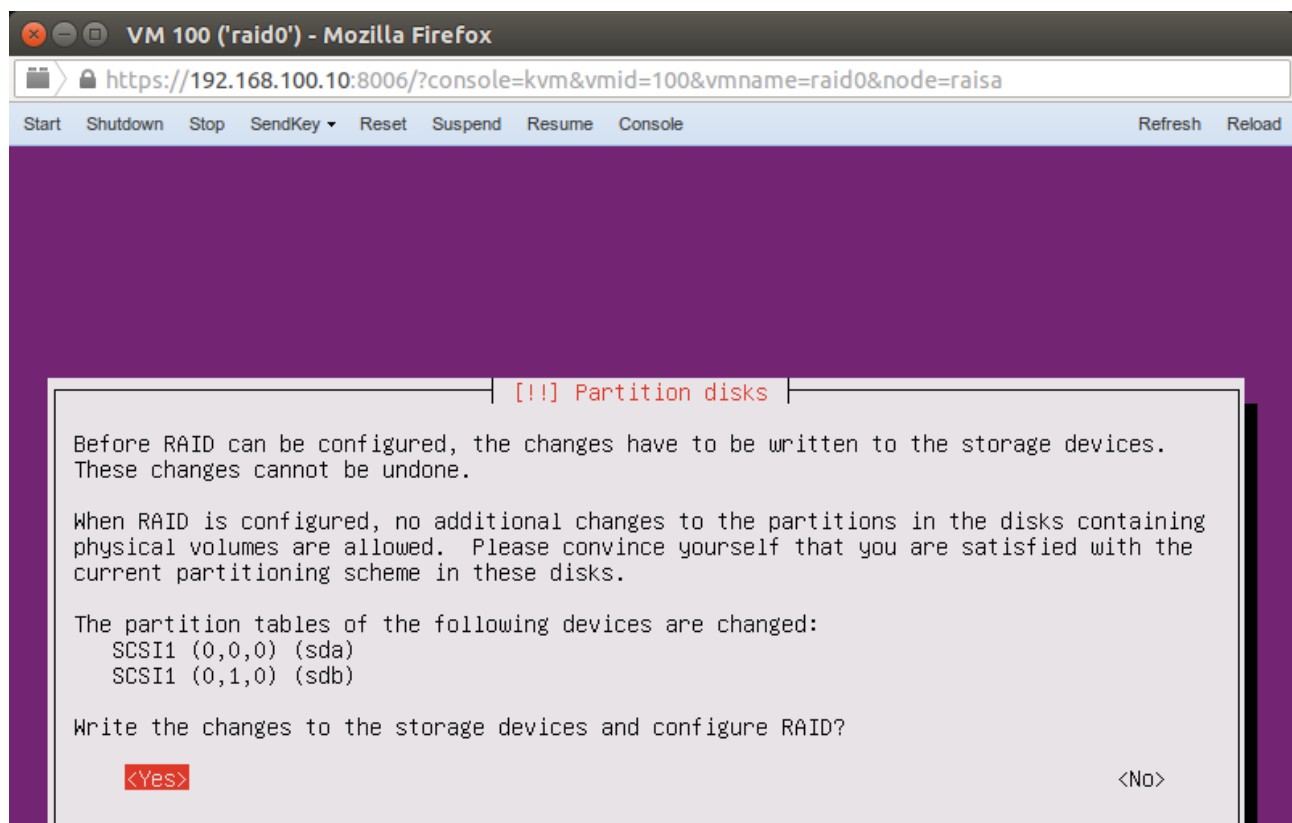




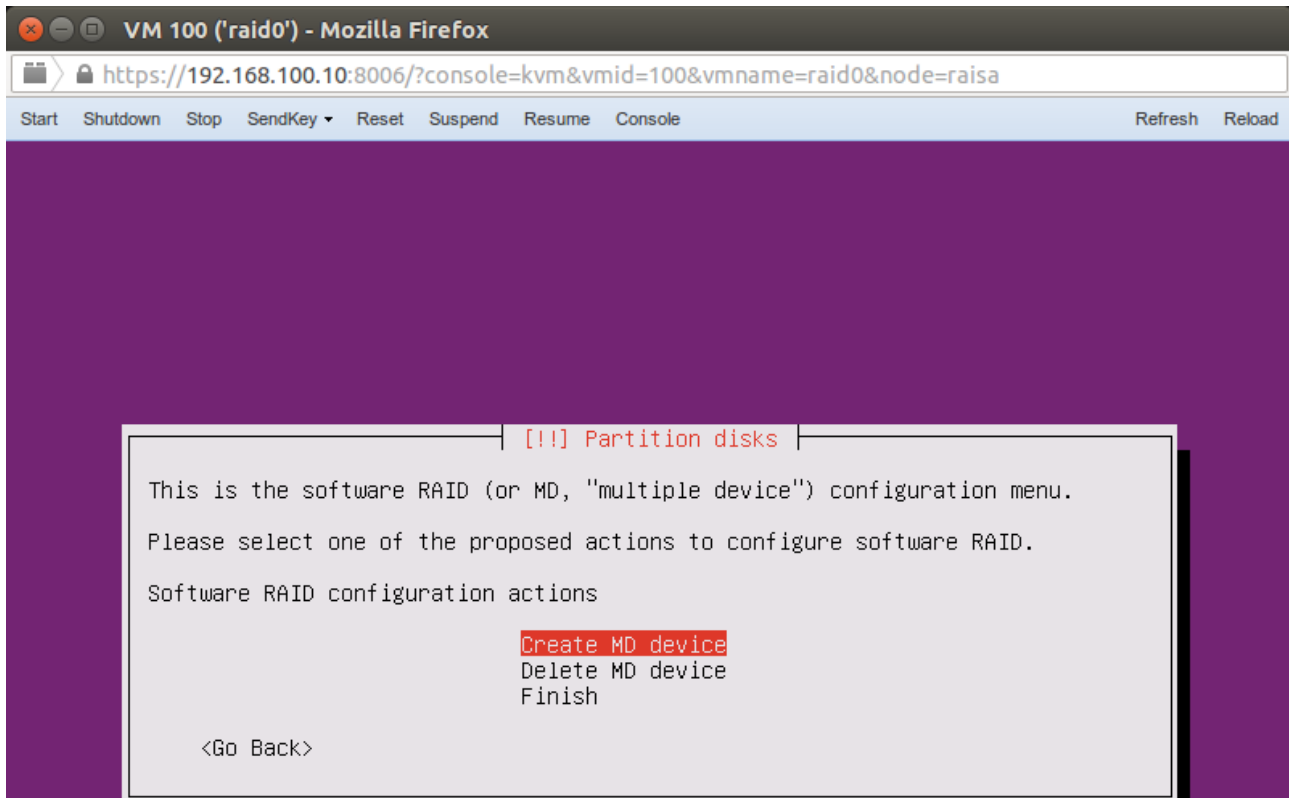
## 16. config software raid.



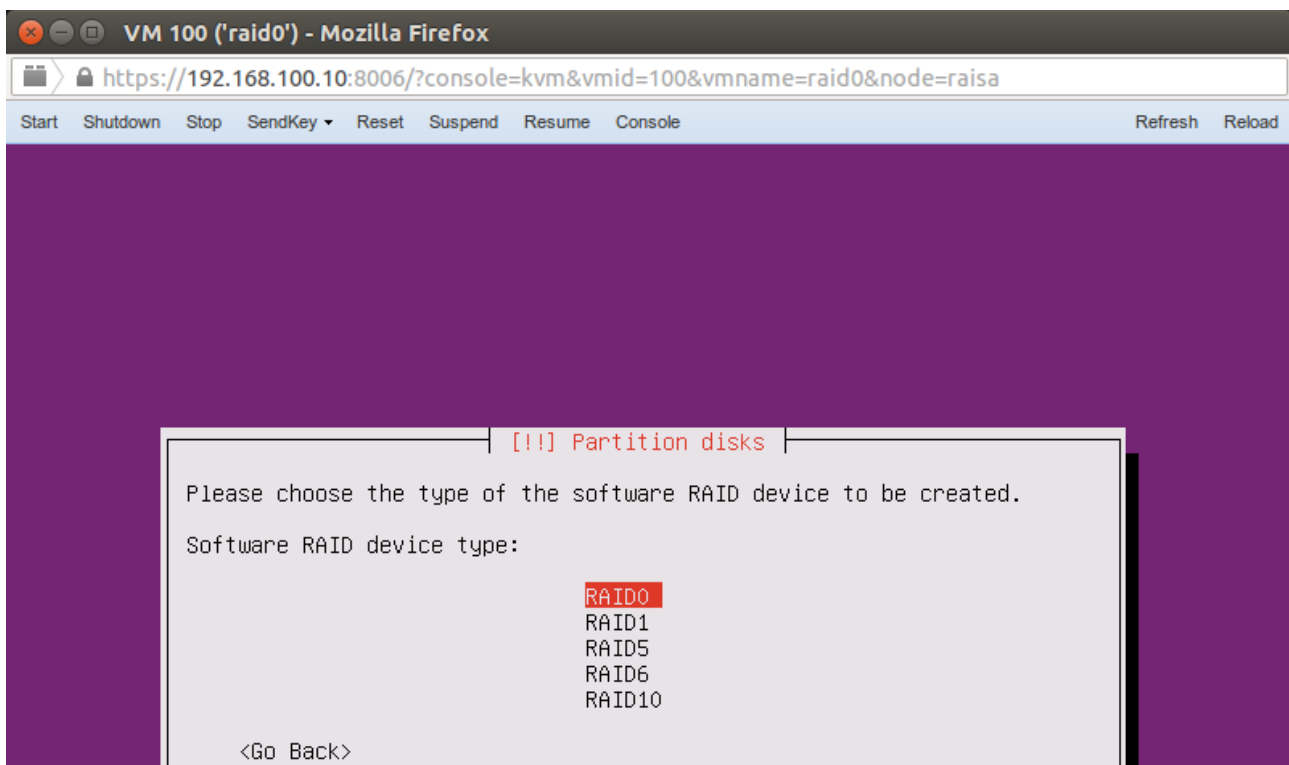
## 17. pilih yes.



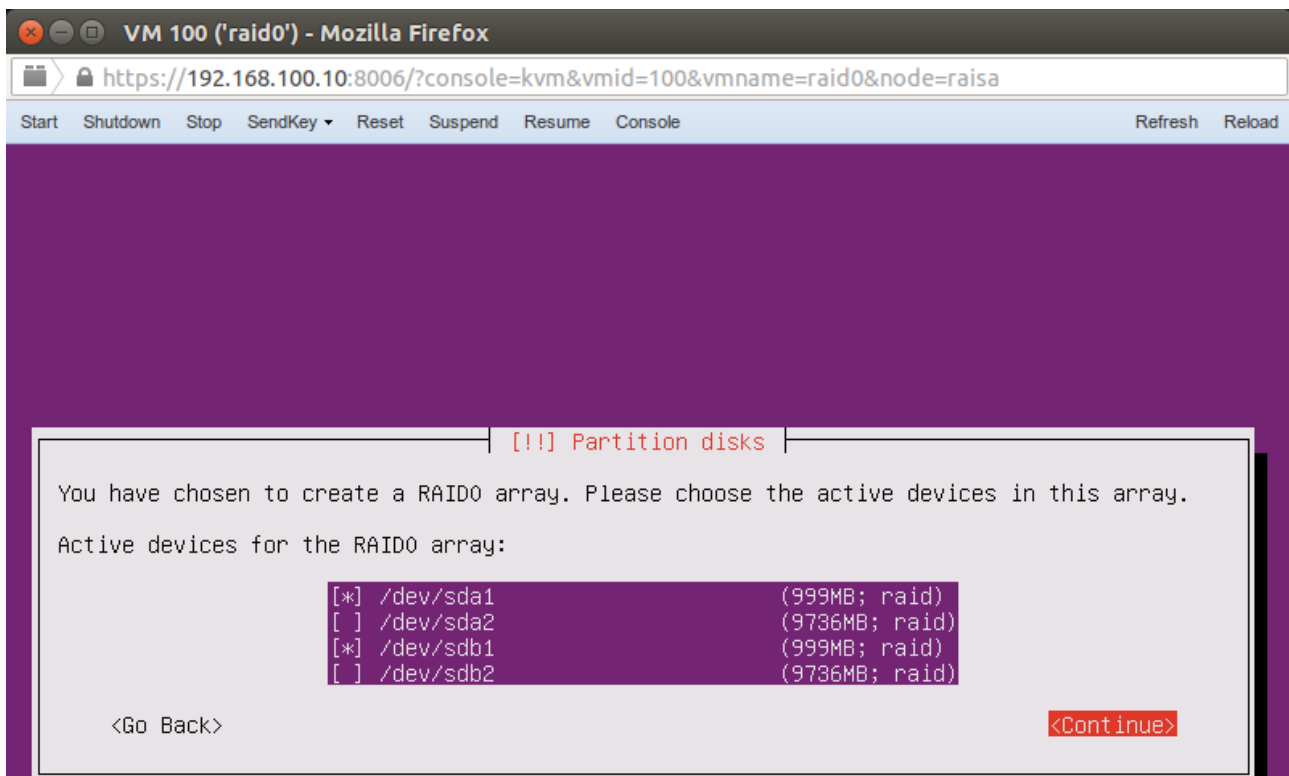
## 18. set create md device.



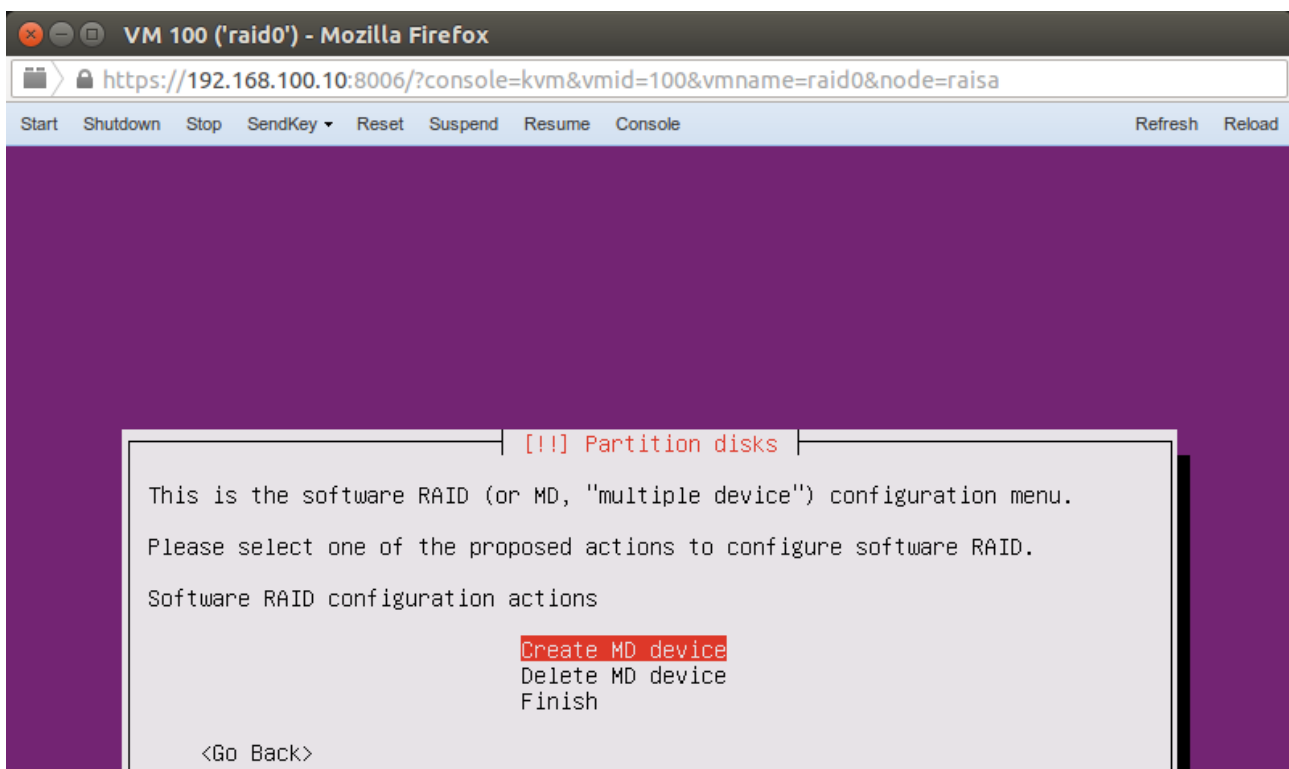
## 19. set raid0.



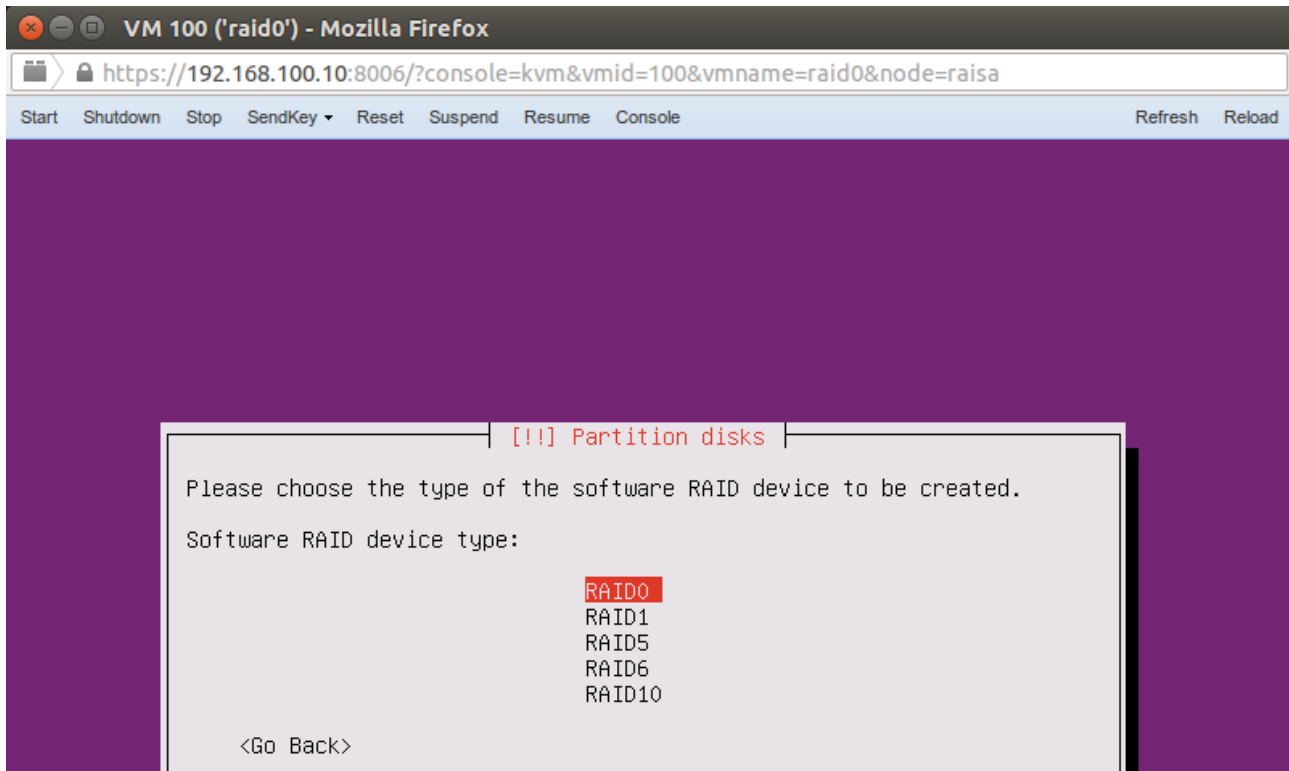
20. set seperti gambar.



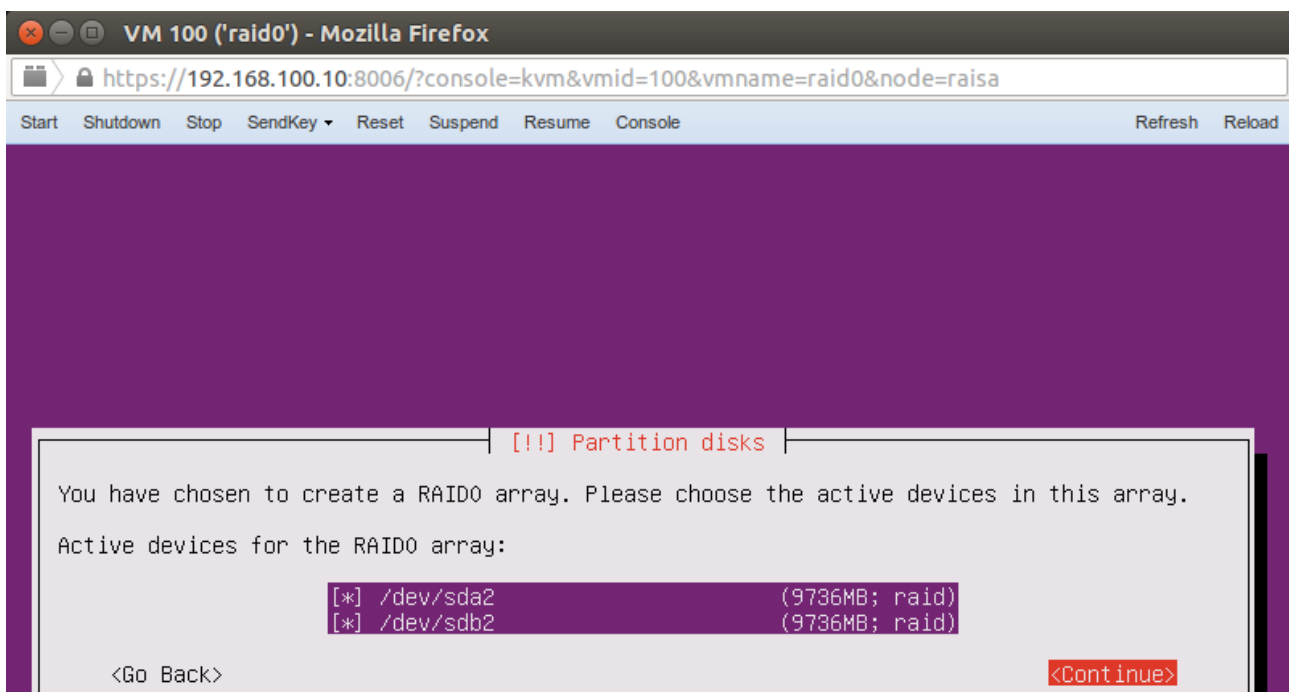
21. set md device lagi.



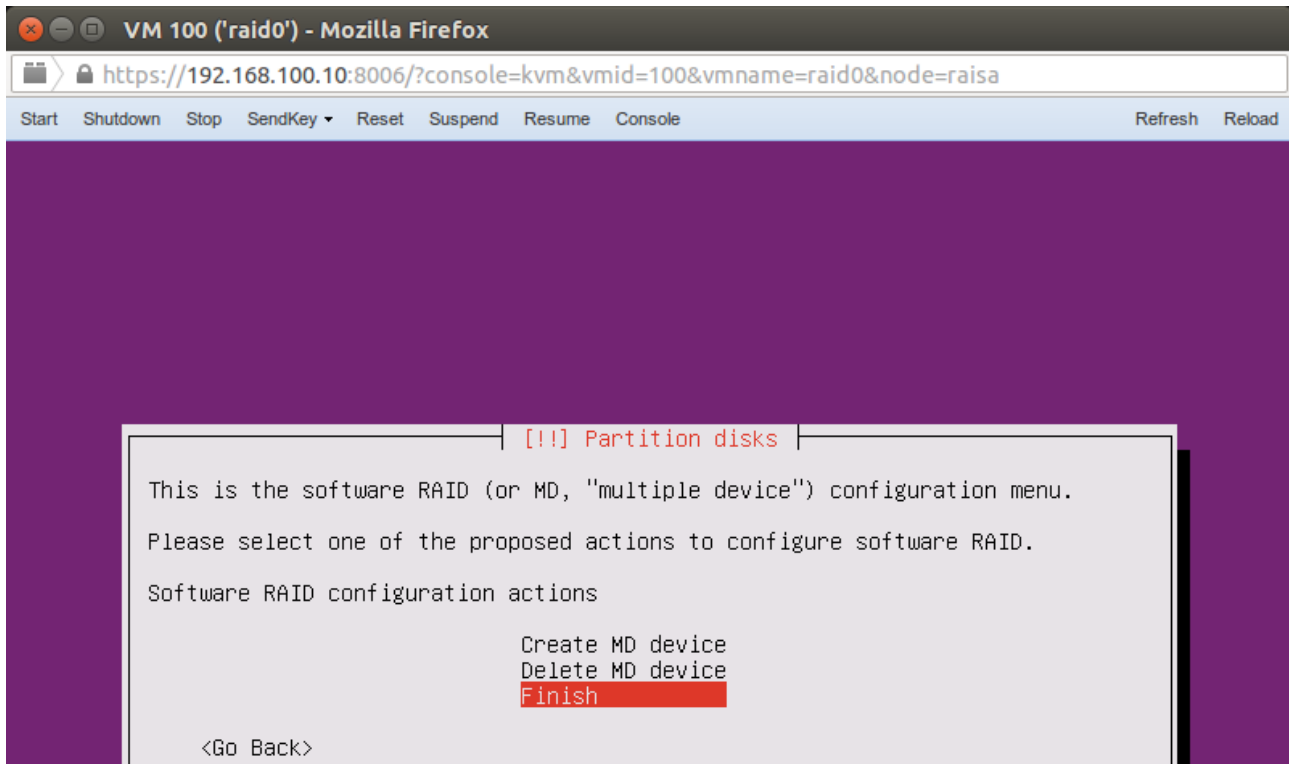
## 22. set raid0 lagi.



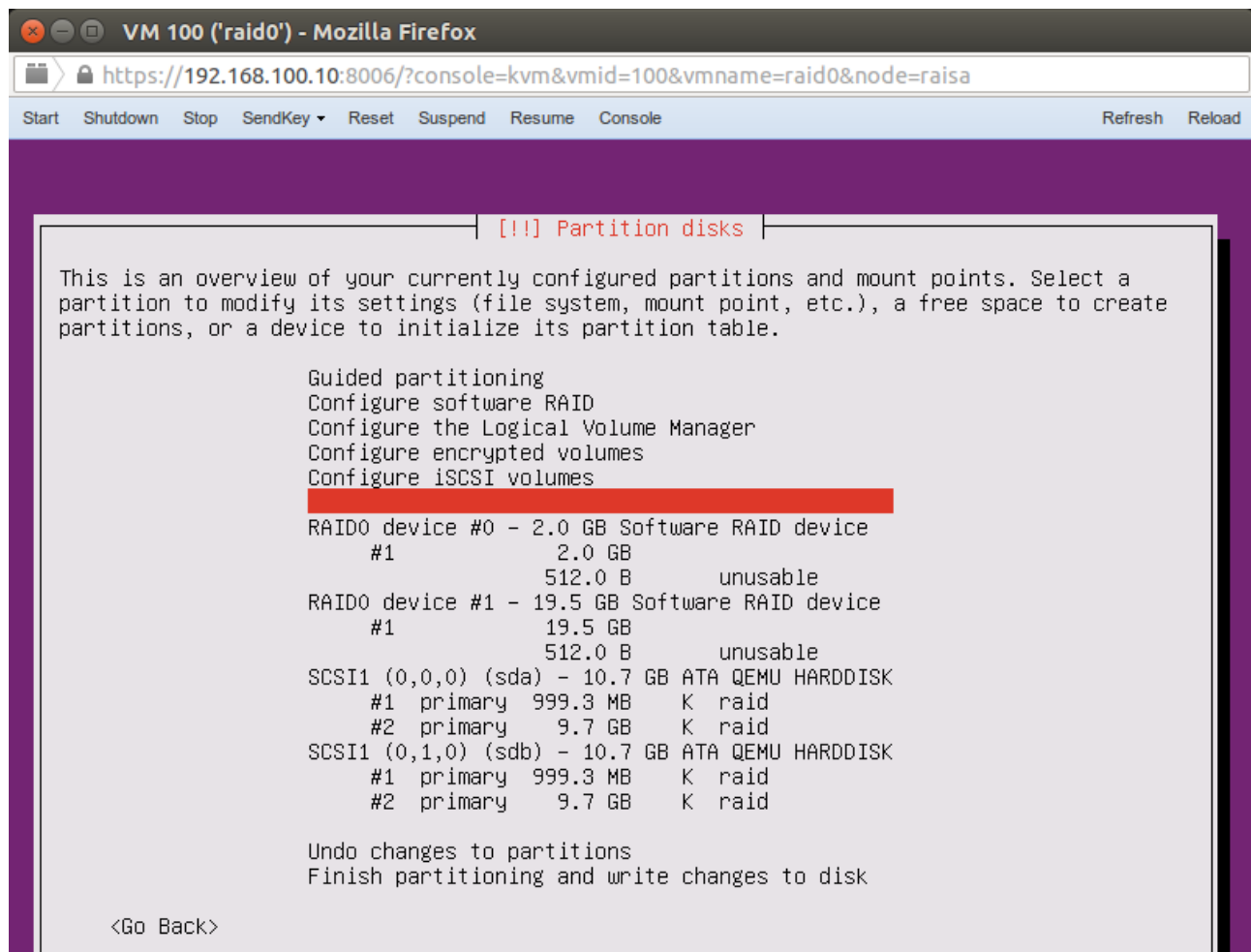
## 23. set seperti gambar.



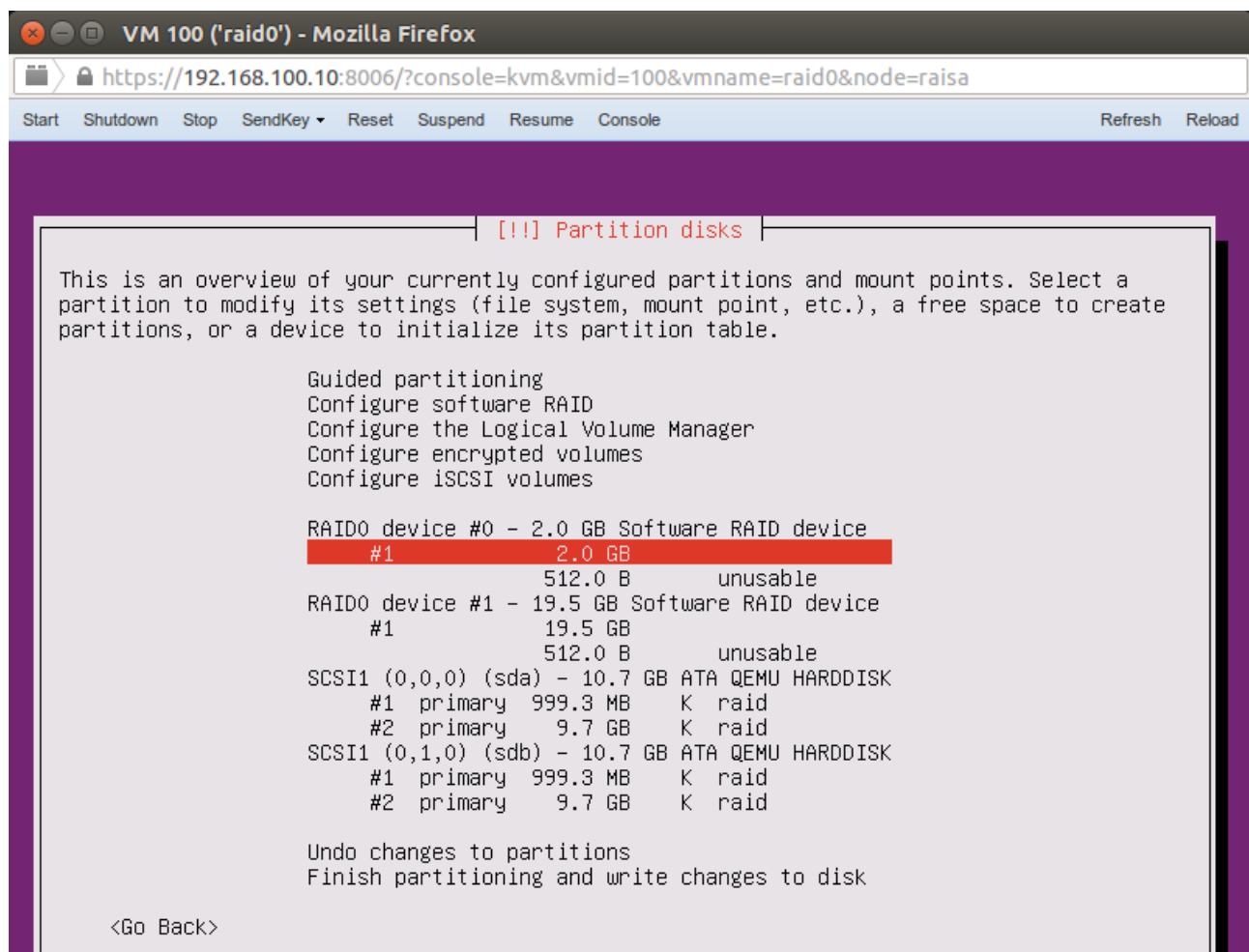
## 24. set finish.



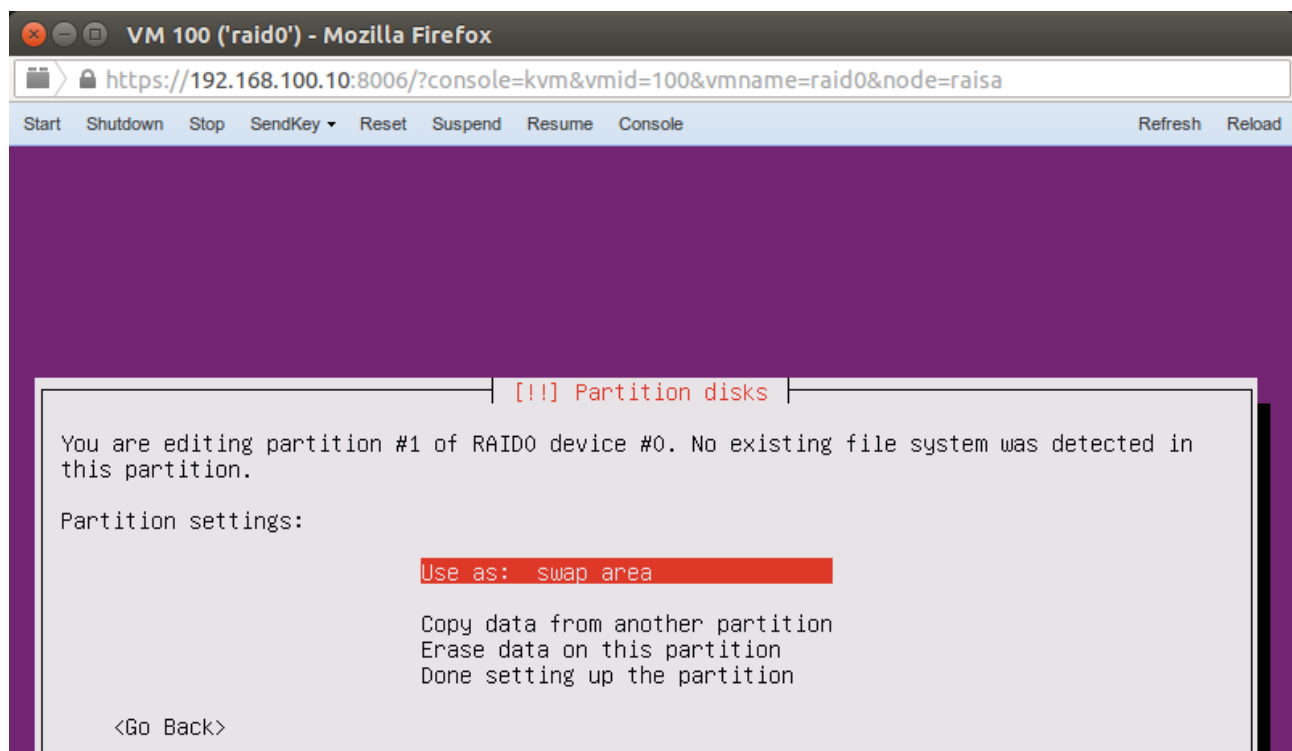
25. sehingga seperti gambar.



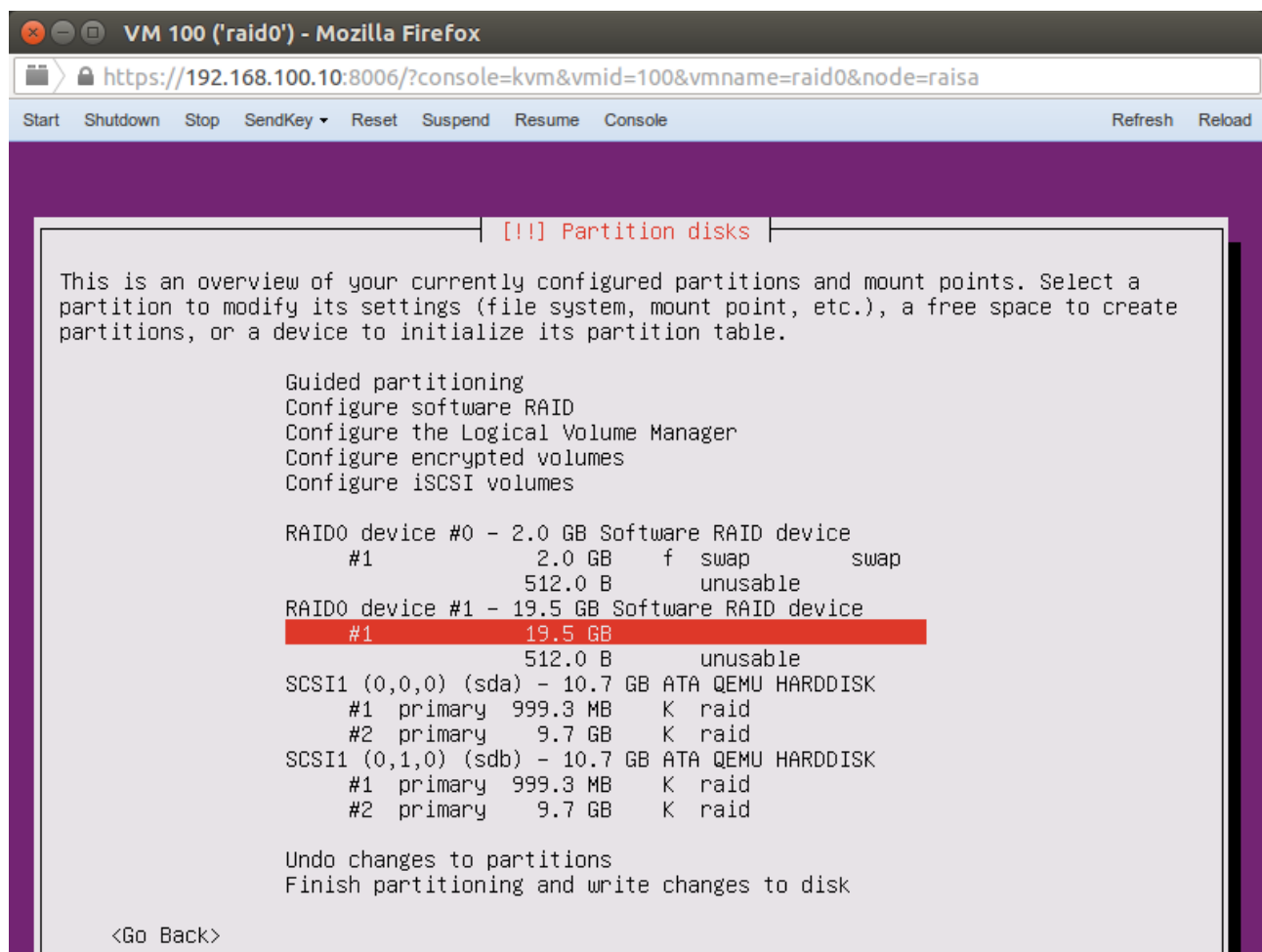
## 26. set partisi 2 GB.



## 27. set swap area.

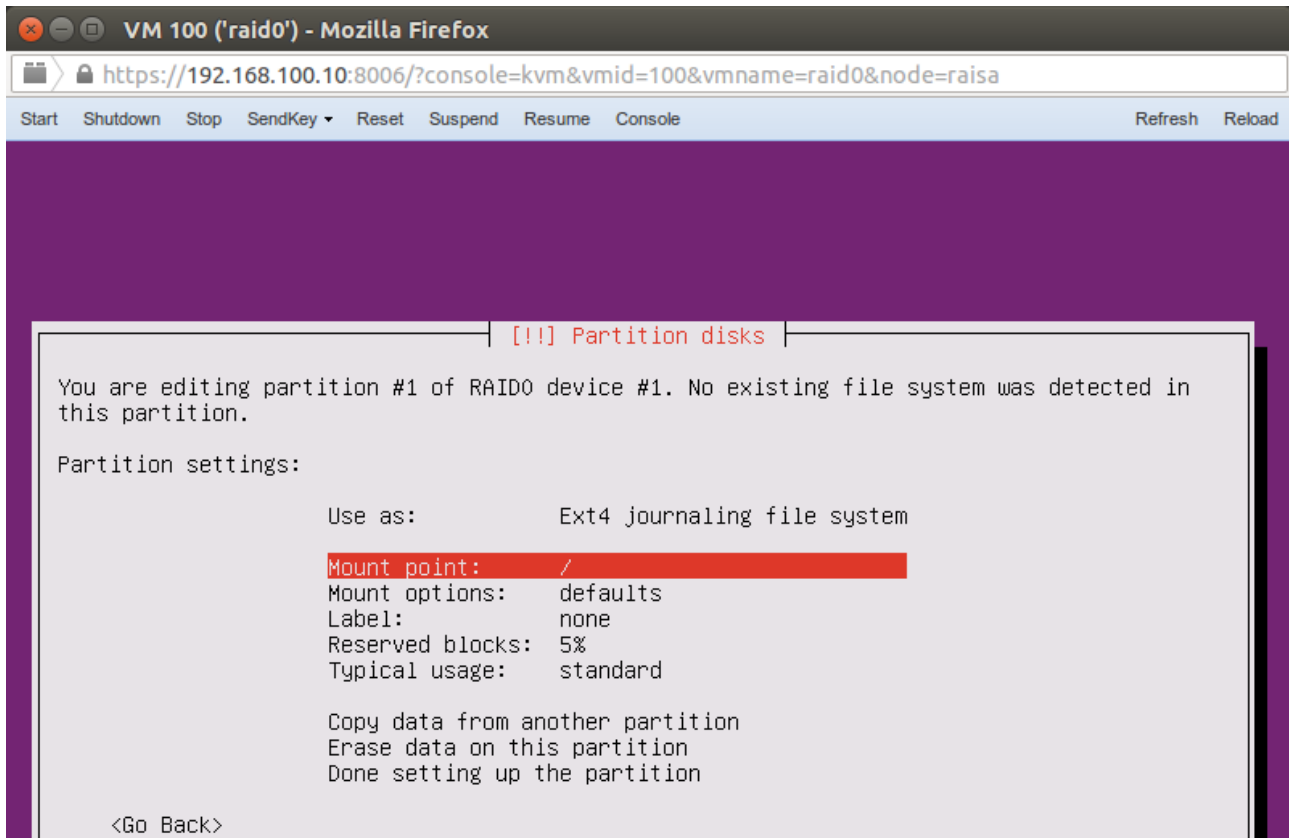


## 28. set partisi 19 GB.

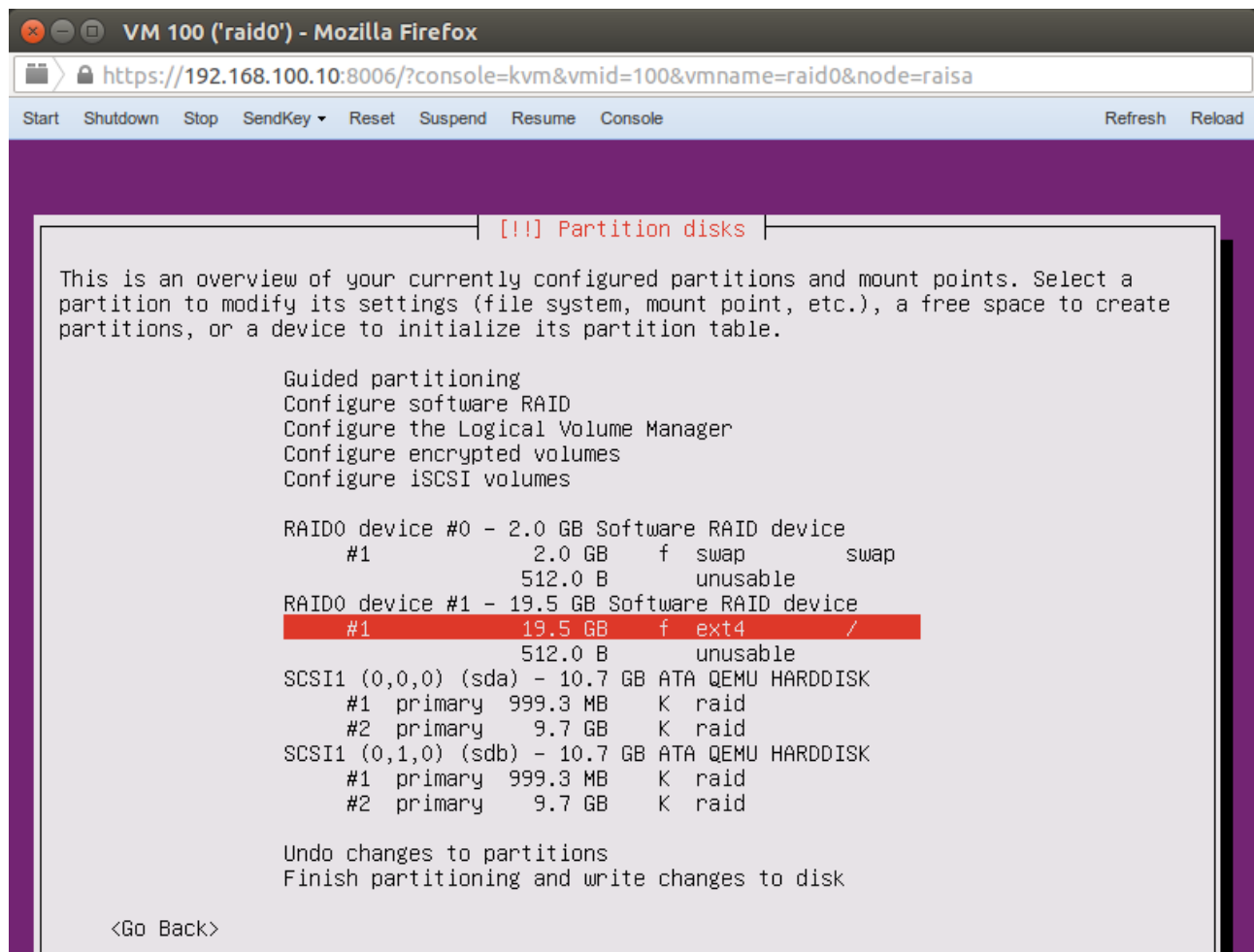




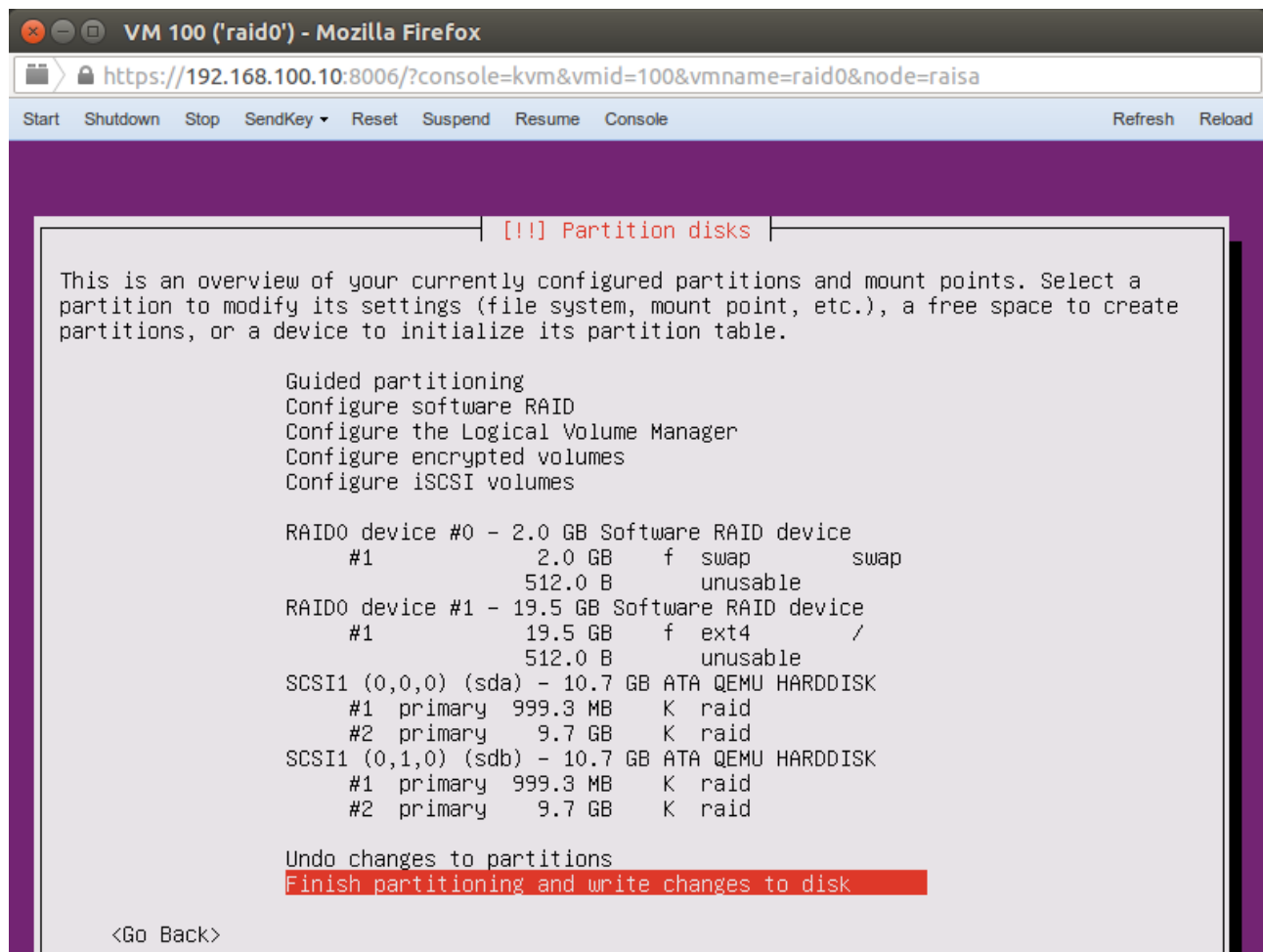
## 29. set ext4 & mount point /.



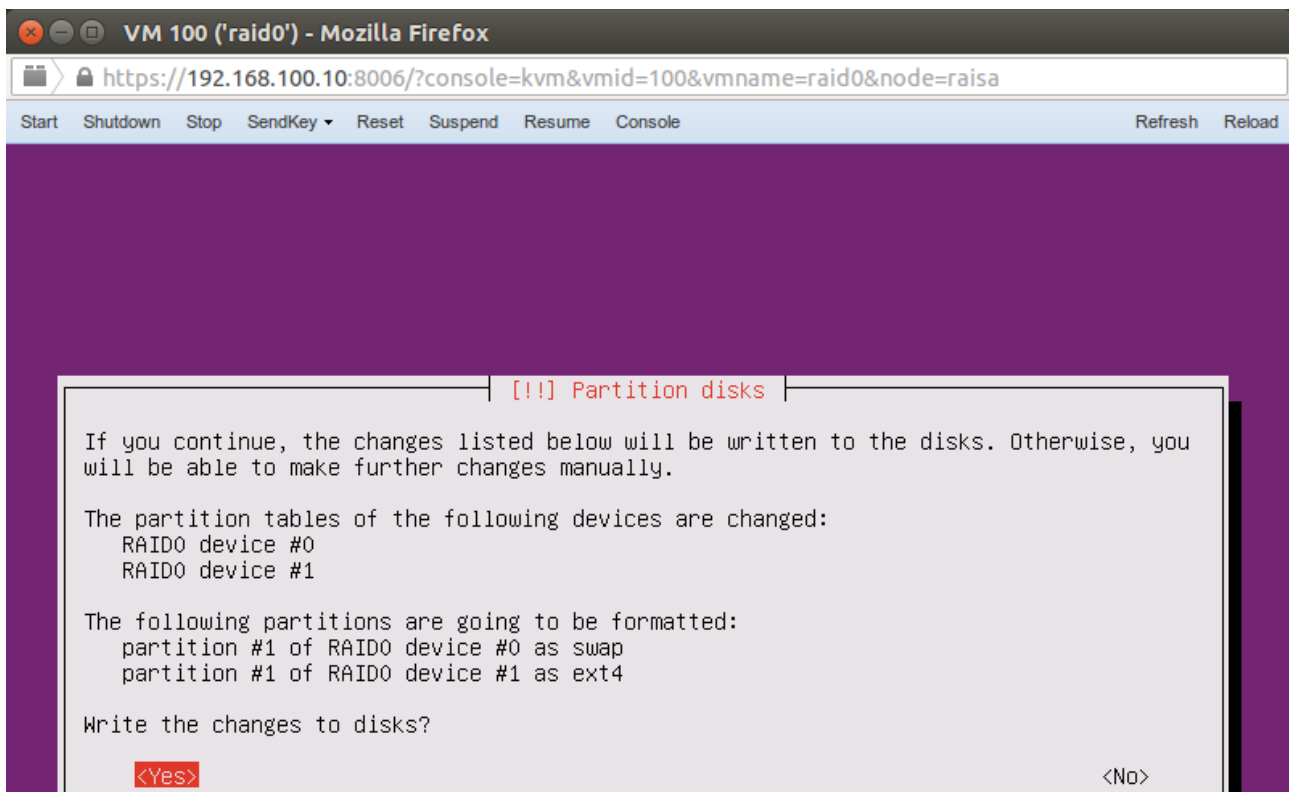
### 30. sehingga seperti ini.



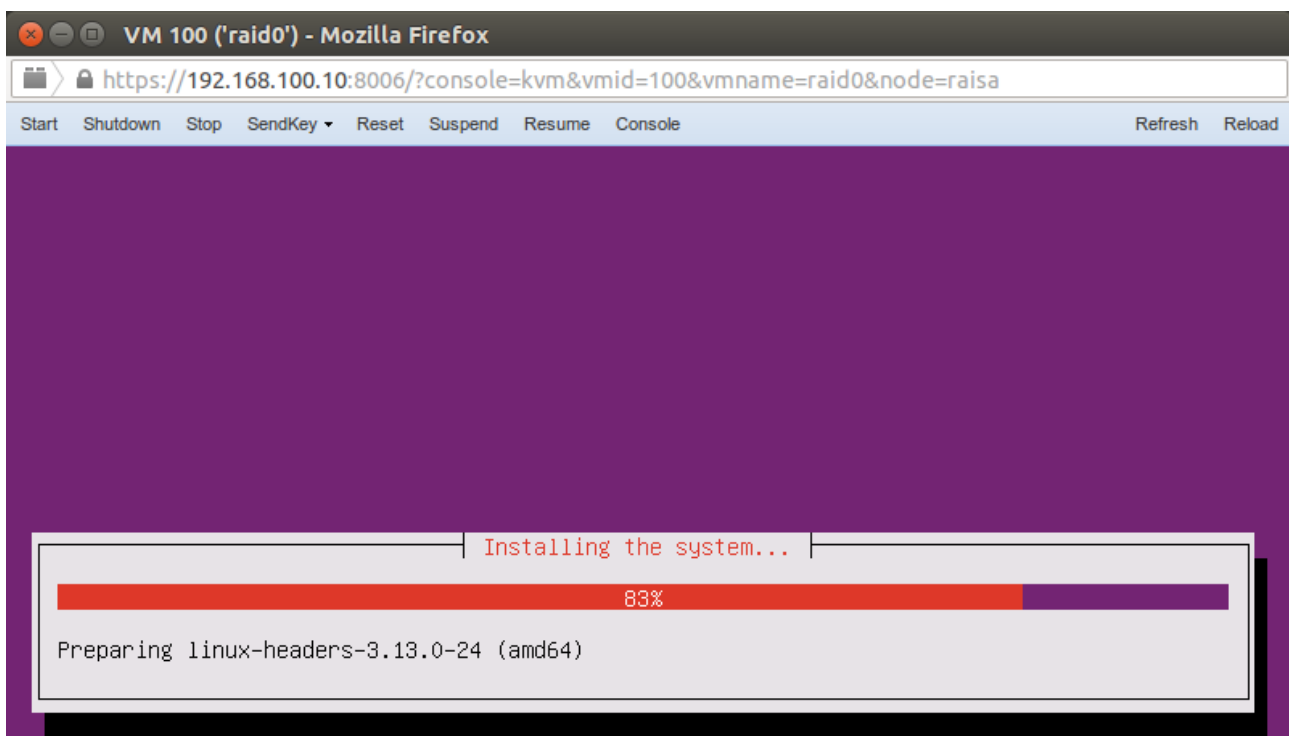
### 31. finish.



32. yes.



33. proses installasi.



### 34. booting vm & cek.

```
VM 100 ('raid0') - Mozilla Firefox
https://192.168.100.10:8006/?console=kvm&vmid=100&vmname=raid0&node=raisa

Start Shutdown Stop SendKey ▾ Reset Suspend Resume Console Refresh Reload

padli@ubuntu:~$ free -m
              total        used        free      shared    buffers      cached
Mem:           2001         178         1823           0           9         109
-/+ buffers/cache:           59         1942
Swap:          1904           0         1904

padli@ubuntu:~$ df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/md1         18G  1.2G   16G   7% /
none            4.0K    0  4.0K   0% /sys/fs/cgroup
udev            991M  4.0K  991M   1% /dev
tmpfs           201M  388K  200M   1% /run
none            5.0M    0   5.0M   0% /run/lock
none           1001M    0 1001M   0% /run/shm
none            100M    0   100M   0% /run/user

padli@ubuntu:~$ _
```

```
VM 100 ('raid0') - Mozilla Firefox
https://192.168.100.10:8006/?console=kvm&vmid=100&vmname=raid0&node=raisa

Start Shutdown Stop SendKey ▾ Reset Suspend Resume Console Refresh Reload

padli@ubuntu:~$ grep /dev/md /etc/fstab
# / was on /dev/md1 during installation
# swap was on /dev/md0 during installation
padli@ubuntu:~$ df -h /home/
Filesystem      Size  Used Avail Use% Mounted on
/dev/md1         18G  1.2G   16G   7% /
/dev/md1         18G  1.2G   16G   7% /

padli@ubuntu:~$ more /proc/mdstat
Personalities : [linear] [multipath] [raid0] [raid1] [raid6] [raid5] [raid4] [raid10]
md1 : active raid0 sdb2[1] sda2[0]
      19014656 blocks super 1.2 512k chunks

md0 : active raid0 sda1[0] sdb1[1]
      1950720 blocks super 1.2 512k chunks

unused devices: <none>
padli@ubuntu:~$
```

```
VM 100 ('raid0') - Mozilla Firefox
https://192.168.100.10:8006/?console=kvm&vmid=100&vmname=raid0&node=raisa

Start Shutdown Stop SendKey ▾ Reset Suspend Resume Console Refresh Reload

padli@ubuntu:~$ sudo mdadm --query --detail /dev/md0
[sudo] password for padli:
/dev/md0:
  Version : 1.2
  Creation Time : Thu Jul  9 09:01:13 2015
    Raid Level : raid0
    Array Size : 1950720 (1905.32 MiB 1997.54 MB)
    Raid Devices : 2
    Total Devices : 2
 Persistence : Superblock is persistent

 Update Time : Thu Jul  9 09:01:13 2015
   State : clean
 Active Devices : 2
Working Devices : 2
Failed Devices : 0
Spare Devices : 0

 Chunk Size : 512K

    Name : ubuntu:0 (local to host ubuntu)
   UUID : e65ebb21:89fb4dcc:6022bcc4:e48d7ab0
  Events : 0

   Number   Major   Minor   RaidDevice State
    0         8         1         0     active sync  /dev/sda1
    1         8        17         1     active sync  /dev/sdb1

padli@ubuntu:~$
```