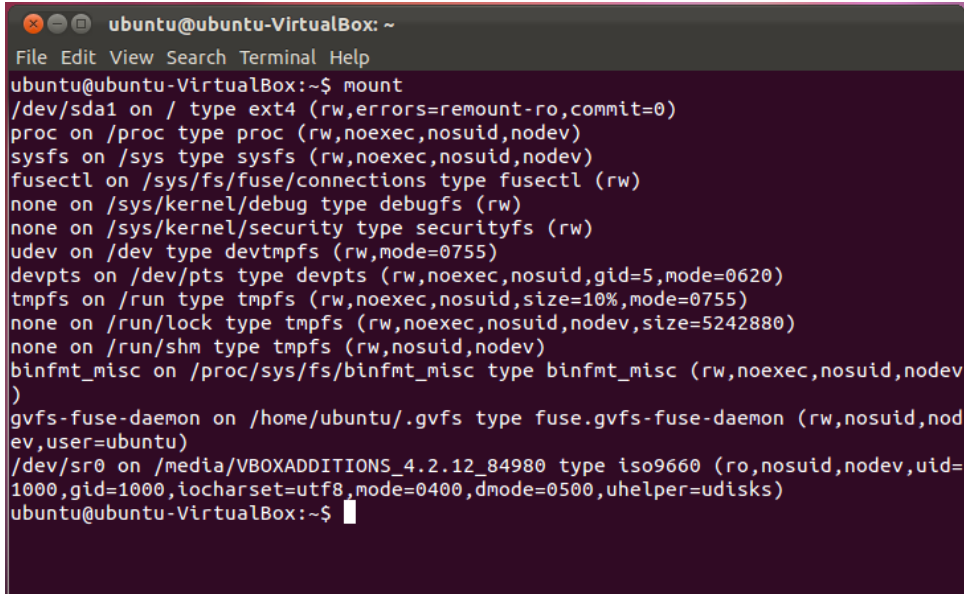


## Cloning and SD Card in Linux

- 1) Purchase a new 16GB or larger Micro-SD card and carrier, so you can preserve the one you are working on.
- 2) Run “mount” and note all the mounted devices and volumes. This will look something like this:



```
ubuntu@ubuntu-VirtualBox: ~  
File Edit View Search Terminal Help  
ubuntu@ubuntu-VirtualBox:~$ mount  
/dev/sda1 on / type ext4 (rw,errors=remount-ro,commit=0)  
proc on /proc type proc (rw,noexec,nosuid,nodev)  
sysfs on /sys type sysfs (rw,noexec,nosuid,nodev)  
fusectl on /sys/fs/fuse/connections type fusectl (rw)  
none on /sys/kernel/debug type debugfs (rw)  
none on /sys/kernel/security type securityfs (rw)  
udev on /dev type devtmpfs (rw,mode=0755)  
devpts on /dev/pts type devpts (rw,noexec,nosuid,gid=5,mode=0620)  
tmpfs on /run type tmpfs (rw,noexec,nosuid,size=10%,mode=0755)  
none on /run/lock type tmpfs (rw,noexec,nosuid,nodev,size=5242880)  
none on /run/shm type tmpfs (rw,nosuid,nodev)  
binfmt_misc on /proc/sys/fs/binfmt_misc type binfmt_misc (rw,noexec,nosuid,nodev)  
gvfs-fuse-daemon on /home/ubuntu/.gvfs type fuse.gvfs-fuse-daemon (rw,nosuid,nodev,user=ubuntu)  
/dev/sr0 on /media/VBOXADDITIONS_4.2.12_84980 type iso9660 (ro,nosuid,nodev,uid=1000,gid=1000,iocharset=utf8,mode=0400,dmode=0500,uhelper=udisks)  
ubuntu@ubuntu-VirtualBox:~$
```

- 3) Insert the Micro-SD in an SD carrier card into your computer or use a USB card reader
- 4) Run “mount” again and you should see your SD card as a new mount that was not there before. Most new SD cards are formatted either FAT32 or NTFS and will typically mount the empty file system and show up as “media” with a device name like /dev/mmcblk0 – note that if the SD card is partitioned you may see /dev/mmcblk0p1, but just ignore the partition.
- 5) Download - <http://ecce.colorado.edu/~ecen5623/ecen/ex/ecen5623/Linux/unbuntu-sd-card.bin.zip>
- 6) Unzip it with “unzip”.
- 7) Go ahead and just clone over the top of whatever is on the SD card (assuming it is new) using the following command:

**dd if=ubuntu-sd-card2-root.bin of=/dev/mmcblk0 conv=noerror bs=1MB**