Exercise - 4

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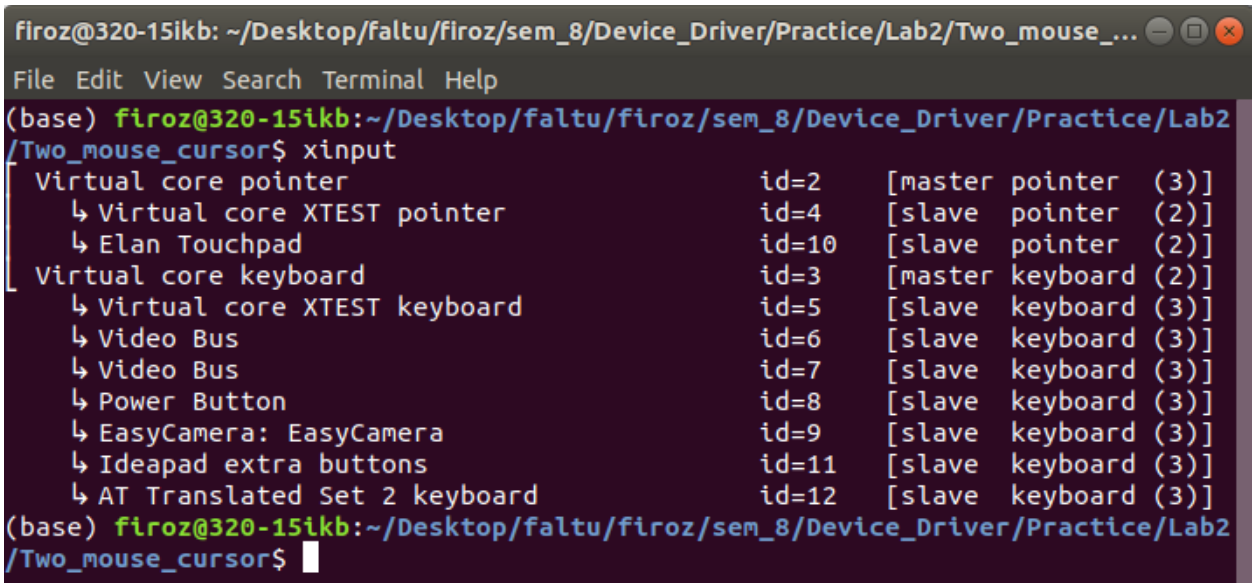
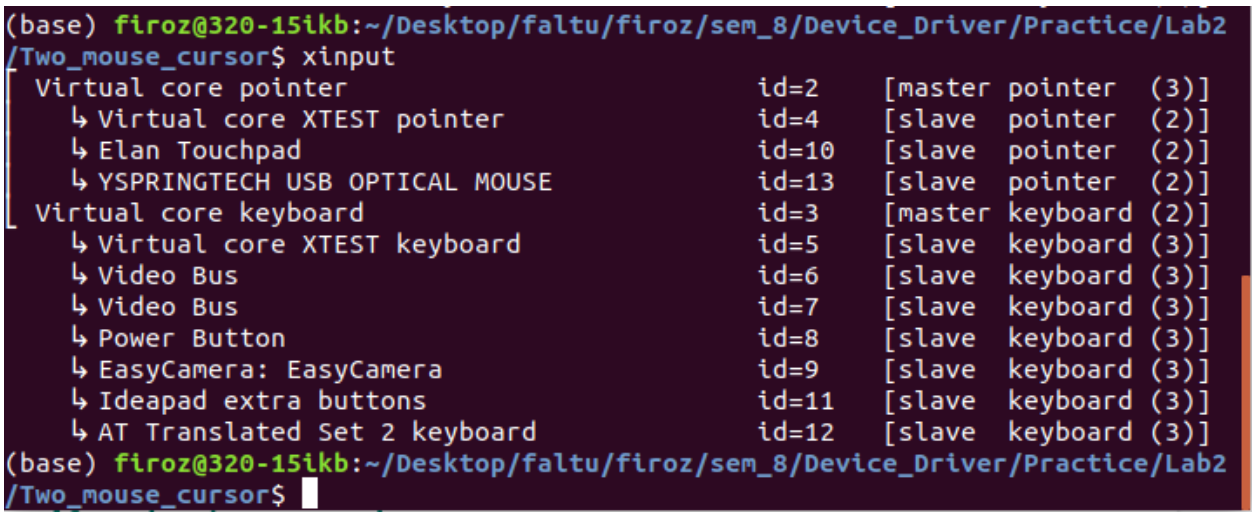
To Have Two Mouse Cursor On Monitor

List out all input devices :



After plugging external mouse :



We could see the YSPRINGTECH USB OPTICAL MOUSE with id = 13 has been added as a slave pointer under master pointer device with id=2

Create a new master device :

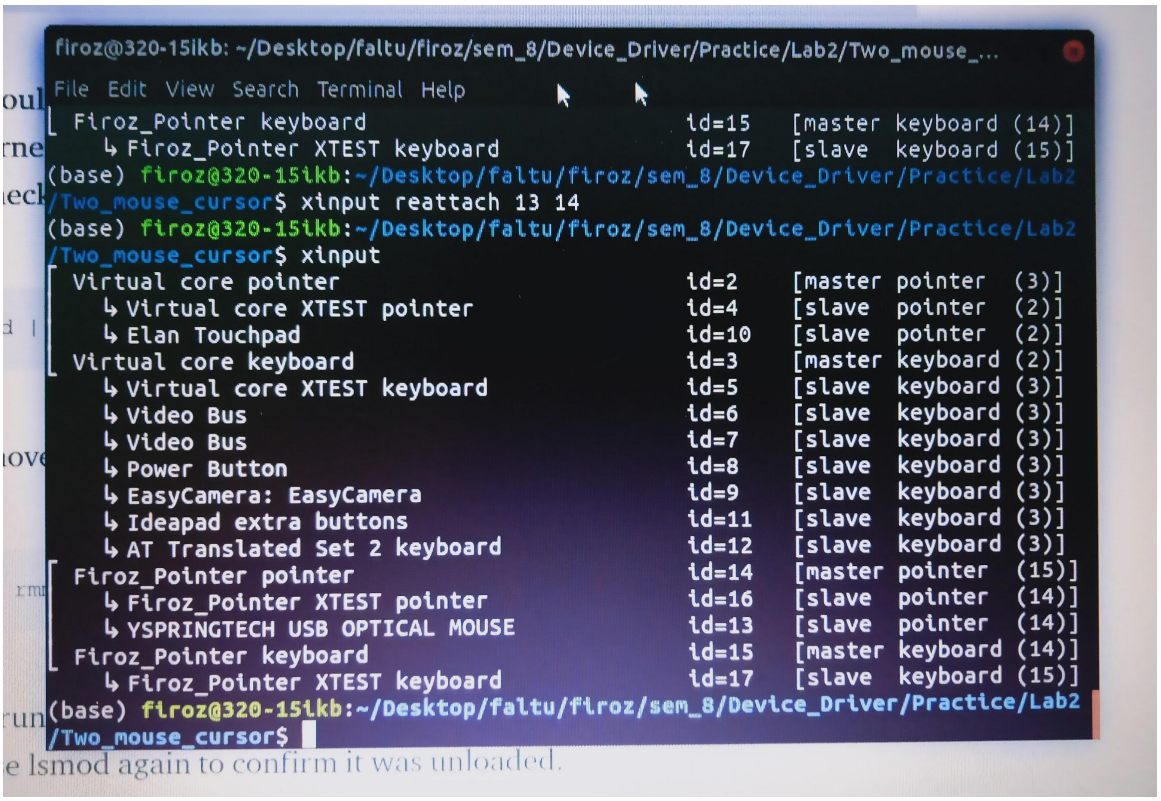
```
(base) firoz@320-15ikb:~/Desktop/faltu/firoz/sem_8/Device_Driver/Practice/Lab2
/Two_mouse_cursor$ xinput create-master Firoz_Pointer
(base) firoz@320-15ikb:~/Desktop/faltu/firoz/sem_8/Device_Driver/Practice/Lab2
/Two_mouse_cursor$ xinput
⎡ Virtual core pointer                          id=2    [master pointer  (3)]
⎜   ↳ Virtual core XTEST pointer                id=4    [slave  pointer  (2)]
⎜   ↳ Elan Touchpad                             id=10   [slave  pointer  (2)]
⎜   ↳ YSPRINGTECH USB OPTICAL MOUSE             id=13   [slave  pointer  (2)]
⎣ Virtual core keyboard                         id=3    [master keyboard (2)]
    ↳ Virtual core XTEST keyboard               id=5    [slave  keyboard (3)]
    ↳ Video Bus                                 id=6    [slave  keyboard (3)]
    ↳ Video Bus                                 id=7    [slave  keyboard (3)]
    ↳ Power Button                              id=8    [slave  keyboard (3)]
    ↳ EasyCamera: EasyCamera                    id=9    [slave  keyboard (3)]
    ↳ Ideapad extra buttons                     id=11   [slave  keyboard (3)]
    ↳ AT Translated Set 2 keyboard              id=12   [slave  keyboard (3)]
⎡ Firoz_Pointer pointer                         id=14   [master pointer  (15)]
⎜   ↳ Firoz_Pointer XTEST pointer               id=16   [slave  pointer  (14)]
⎣ Firoz_Pointer keyboard                        id=15   [master keyboard (14)]
    ↳ Firoz_Pointer XTEST keyboard              id=17   [slave  keyboard (15)]
(base) firoz@320-15ikb:~/Desktop/faltu/firoz/sem_8/Device_Driver/Practice/Lab2
/Two_mouse_cursor$
```

You can see that a new master pointer and keyboard has been created with pointer id = 14 and keyboard id = 15.

One should notice that there are no slave devices(physical hardware) under the newly created master pointer and keyboard.

So, we need to move one of my mouse to the new master pointer device.

Reattach one of mouse to the newly created master device pointer :

```
(base) firoz@320-15ikb:~/Desktop/faltu/firoz/sem_8/Device_Driver/Practice/Lab2
/Two_mouse_cursor$ xinput reattach 13 14
(base) firoz@320-15ikb:~/Desktop/faltu/firoz/sem_8/Device_Driver/Practice/Lab2
/Two_mouse_cursor$ xinput
⎡ Virtual core pointer                          id=2    [master pointer  (3)]
⎜   ↳ Virtual core XTEST pointer                id=4    [slave  pointer  (2)]
⎜   ↳ Elan Touchpad                             id=10   [slave  pointer  (2)]
⎣ Virtual core keyboard                         id=3    [master keyboard (2)]
    ↳ Virtual core XTEST keyboard               id=5    [slave  keyboard (3)]
    ↳ Video Bus                                 id=6    [slave  keyboard (3)]
    ↳ Video Bus                                 id=7    [slave  keyboard (3)]
    ↳ Power Button                              id=8    [slave  keyboard (3)]
    ↳ EasyCamera: EasyCamera                    id=9    [slave  keyboard (3)]
    ↳ Ideapad extra buttons                     id=11   [slave  keyboard (3)]
    ↳ AT Translated Set 2 keyboard              id=12   [slave  keyboard (3)]
⎡ Firoz_Pointer pointer                         id=14   [master pointer  (15)]
⎜   ↳ YSPRINGTECH USB OPTICAL MOUSE             id=13   [slave  pointer  (14)]
⎜   ↳ Firoz_Pointer XTEST pointer               id=16   [slave  pointer  (14)]
⎣ Firoz_Pointer keyboard                        id=15   [master keyboard (14)]
    ↳ Firoz_Pointer XTEST keyboard              id=17   [slave  keyboard (15)]
(base) firoz@320-15ikb:~/Desktop/faltu/firoz/sem_8/Device_Driver/Practice/Lab2
/Two_mouse_cursor$
```

Here , I have attached my external USB Optical Mouse with id=13 to Firoz_Pointer master pointer with id=14.