Lab – interrupts

1. Open the file ~/aosp/kernel/drivers/switch/hds_max1462x.c for edit

2. Add #define DEBUG before all include files

3. Create a new wait queue and a flag for condition

   DECLARE_WAIT_QUEUE_HEAD(hq);

   static int wq_flag=0;

4. Create a read function for a new character device and send the reading process to the above wait queue

   wait_event(hq,wq_flag);
   wq_flag=0;

5. Create a file_operation object with the read function

6. Edit the jack ISR (max1462x_earjack_det_irq_handler) , set the flag and wake up the waiting process

   wq_flag = 1;
   wake_up(&hq);

7. Edit the init function (max1462x_hsd_init) , create the character device with id (230,0) and create the device for sysfs

   device_create(class_create(THIS_MODULE,"myclass"), NULL,
                                          MKDEV(230,0), NULL, "jack");

8. Build the kernel and test your work

sudo su

cd ~/aosp
source build/envsetup.sh
lunch 8
cd kernel
make
cp arch/arm/boot/zImage-dtb   ../device/lge/hammerhead-kernel
cd ..
make
adb reboot-bootloader
fastboot –w flashall