#include <stdio.h>
#include <dos.h>
#include <stdio.h>
#define R_SHIFT 1
#define L_SHIFT 2
#define CTRL 4
#define ALT 8
#define SCROLL_LOCK 16
#define NUM_LOCK 32
#define CAPS_LOCK 64
#define INSERT_ON 128

unsigned char get_key_flags()
{
    union REGS inregs, outregs;
    inregs.h.ah=0;
    int86(0x16, &inregs, &outregs);
    /* key reading */

    inregs.h.ah=2;
    int86(0x16, &inregs, &outregs);
    /* special keys reading */
    return (outregs.h.al);
}

void main()
{
    unsigned char status, get_key_flags(void);

    clrscr();
    status=get_key_flags();
    if (status & R_SHIFT)
        printf("Right shift\n");
    if (status & L_SHIFT)
        printf("Left shift\n");
    if (status & CTRL)
        printf("CTRL key\n");
    if (status & ALT)
        printf("ALT key\n");
    if (status & SCROLL_LOCK)
        printf("Scroll lock\n");
    if (status & NUM_LOCK)
        printf("Num lock\n");
    if (status & CAPS_LOCK)
        printf("Caps lock\n");
    if (status & INSERT_ON)
        printf("Insert key\n");
}