

```
.global u_entry, main0, syscall, getmysp, getcsr, getmyaddress
.global mexit
.text
.code 32
// upon entry, bl main0 => r0 contains pointer to the string in ustack

u_entry:
    mov r0, r1
    bl main0
    mov r0, #0
    bl mexit

// if main0() ever retrun: syscall to exit(0)

@ user process issues int syscall(a,b,c,d) ==> a,b,c,d are in r0-r3
syscall:

//  mov r4, sp  // r4 = usp
//  mov r5, pc  // r5 = return PC
    swi #0
    mov pc, lr

getmysp:
    mov r0, sp
    mov pc, lr

getcsr:
    mrs r0, cpsr
    mov pc, lr
getmyaddress:
    ldr r0, =main0
    mov pc, lr
```