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#Chương trình: while-tìm ký tự trong chuỗi
#-----
                .include "macro.mac"
#Data segment
                .data
#Cac dinh nghia bien
str_s:         .ascii "Computer Architecture CSE-HCMUT."
char_c:        .byte  'u'
int_vtri:      .word   13
#Cac cau Xuat nhap du lieu
nhap_c:        .ascii "Nhap ky tu: "
xuat_tt:       .ascii "Tim thay ky tu tai vi tri "
xuat_kt1:      .ascii "Khong tim thay ky tu '"
xuat_kt2:      .ascii "' trong chuỗi."
daungan:       .ascii "\n=====\\n"
#-----
#Code segment
                .text
#-----
# Chương trình chính
#-----
main:
#Nhap (syscall)
    # Nhap ky tu
        getch_p    nhap_c, char_c
        linefeed

#Xu ly
    # t0=s[i]/kq, t1=c, t3=i(=0), a1=sptr(=addr(s[0]))
        lb         $t1, char_c
        addi        $t3, $zero, 0
        la         $a1, str_s
    #while ( s[i]!=kytu && s[i]!='\\0')
wcond:
        lb         $t0, 0($a1)    #s[i]
        # DK1': s[i]==kytu
        beq        $t0, $t1, endwh
        # DK2': s[i]=='\\0'
        beq        $t0, $zero, endwh
    #wbody
        addi        $t3, $t3, 1    #i++
        addi        $a1, $a1, 1    #sptr++
        j          wcond
    #endwh
endwh:
#Xuat ket qua (syscall)
    #if (s[i]!='\\0')
        beq        $t0, $zero, else1
    #then:tim thay
        addi        $t3, $t3, 1
        sw         $t3, int_vtri
        putu_p      xuất_tt, int_vtri
        j          endif
    #else:khong tim thay
else:

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        puts      xuat_kt1
        putch     char_c
        puts      xuat_kt2
    #endif
endif:
        puts      daungan
        j         main
#ket thuc chuong trinh (syscall)
Kthuc:  addi      $v0,$zero,10
        syscall
#-----

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