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ASSIGNMENT 3

.eqv IN\_ADRESS\_HEXA\_KEYBOARD 0xFFFF0012

.eqv OUT\_ADRESS\_HEXA\_KEYBOARD 0xFFFF0014

.data

Message: .asciiz "Key scan code "

.text

main:

li $t1, IN\_ADRESS\_HEXA\_KEYBOARD

li $t3, 0x80 # bit 7 = 1 to enable

sb $t3, 0($t1)

xor $s0, $s0, $s0 # count = $s0 = 0

Loop:

addi $s0, $s0, 1 # count = count + 1

prn\_seq:

addi $v0,$zero,1

add $a0,$s0,$zero # print auto sequence number

syscall

prn\_eol:

addi $v0,$zero,11

li $a0,'\n' # print endofline

syscall

sleep:

addi $v0,$zero,32

li $a0,300 # sleep 300 ms

syscall

nop # WARNING: nop is mandatory here.

b Loop # Loop

end\_main:

.ktext 0x80000180

IntSR:

addi $sp,$sp,4 # Save $ra because we may change it later

sw $ra,0($sp)

addi $sp,$sp,4 # Save $at because we may change it later

sw $at,0($sp)

addi $sp,$sp,4 # Save $sp because we may change it later

sw $v0,0($sp)

addi $sp,$sp,4 # Save $a0 because we may change it later

sw $a0,0($sp)

addi $sp,$sp,4 # Save $t1 because we may change it later

sw $t1,0($sp)

addi $sp,$sp,4 # Save $t3 because we may change it later

sw $t3,0($sp)

prn\_msg:

addi $v0, $zero, 4

la $a0, Message

syscall

li $t6, 0x1

li $t3, 0x81 # check row 4 and re-enable bit 7

get\_cod:

li $t1, IN\_ADRESS\_HEXA\_KEYBOARD

bgt $t3, 0x88, reset

sb $t3, 0($t1) # must reassign expected row

li $t1, OUT\_ADRESS\_HEXA\_KEYBOARD

lb $a0, 0($t1)

bnez $a0, prn\_cod

mul $t6, $t6, 2

add $t3, $t6, 0x80

j get\_cod

prn\_cod:

li $v0,34

syscall

li $v0,11

li $a0,'\n' # print endofline

syscall

next\_pc:

mfc0 $at, $14 # $at <= Coproc0.$14 = Coproc0.epc

addi $at, $at, 4 # $at = $at + 4 (next instruction)

mtc0 $at, $14 # Coproc0.$14 = Coproc0.epc <= $at

restore:lw $t3, 0($sp) # Restore the registers from stack

addi $sp,$sp,-4

lw $t1, 0($sp) # Restore the registers from stack

addi $sp,$sp,-4

lw $a0, 0($sp) # Restore the registers from stack

addi $sp,$sp,-4

lw $v0, 0($sp) # Restore the registers from stack

addi $sp,$sp,-4

lw $ra, 0($sp) # Restore the registers from stack

addi $sp,$sp,-4

lw $ra, 0($sp) # Restore the registers from stack

addi $sp,$sp,-4

return:

eret # Return from exception

reset:

li $t3, 0x81

li $t6, 0x1

j get\_cod

* **Kết quả :**

Ảnh có chứa văn bản

Mô tả được tạo tự động