

Selection_Sort

.data

message: .asciz "ingrese numero"

esp: .asciz "

.align 2

array: .space 10

.text

main:

la \$\$0, array

li \$\$1, 0 #i

li \$\$2, 5 #n

loop:

beq \$\$1, \$\$2, reset

li \$\$0, 1

la \$\$0, message

syscall

li \$\$0, 5

syscall

sw \$\$0, 0(\$\$0)

addi \$\$0, \$\$0, 4

addi \$\$1, \$\$1, 1

loop

reset:

li \$\$1, 0 #i<0

li \$\$2, 4 #n-1

for-ext:

beg \$S1, \$S2, resetz
move \$T0, \$S1 # min_idb<-1
addi \$T1, \$S1, 1 # \$C-i+1

for-int:

li \$T8, 5 #n
beg \$T1, \$T8 swap
mul \$T2, \$T1, 4
la \$S0, array
add \$S3, \$S0, \$T2
lw \$T4, 0(\$S3) # \$T4<- arr[J]
mult \$T3, \$T0, 4
add \$S4, \$S0, \$T3
lw \$T5, 0(\$S4) # \$T5<- arr[min_idb]
bge \$T4, \$T5, next_J
move \$T0, \$T1

next_J:

addi \$T1, \$T1, 1
\$ for_int

Swap:

mul \$T2, \$S1, 4
la \$S0, array
add \$S3, \$S0, \$T2 # div de arr[i]
lw \$T4, 0(\$S3) # valor de arr[i]

mul \$t₃, \$t_{0,4}
add \$s₄, \$s₀, \$t₃. # Dir arr[min-id] × 1
lw \$t₅, 0(\$s₄) # valor arr[min-1d]
sw \$t₅, 0(\$s₃) # arr[i] ← valor min
sw \$t₄, 0(\$s₄) # arr[min-1d] ← valor i
addi \$s₁, \$s₁, 1
J for-cont

reset 2:

la \$s₀, array

li \$s₁, 0

li \$s₂, 5

imprimir:

beq \$s₁, \$s₂, exit

lw \$s₀, 0(\$s₀)

li \$v₀, 1

syscall

li \$v₀, 4

la \$s₀, esp

syscall

addi \$s₀, \$s₀, 4

addi \$s₁, \$s₁, 1

J imprimir

exit:

li \$v₀, 10

syscall