```
.bubble_sort

.data
  array: .space 20
  mensaje: .asciiz "Ingrese numero"
  esp: .asciiz " "
.text
main:
  La $t0, array
  Li $t1, 0 #i
  Li $t2, 5 #n
  Li $t3, 0 #s

Llenar:
  beq $t4 $t2, reset #si i=n salir
  Li $v0, 4
  La $a0, mensaje
  syscall
  Li $v0, 5
  syscall
  sw $v0, 0($t0) #guardar en arr por Teclado
  addi $t0, $t0, 4
  addi $t1, $t1, 1

reset:
  La $t0, array
  L: $t1, 0
```

```
for_externo:
 addi $t1, $t1, 1   # i++
 bgt $t1, $t2, reset2 # si i>n salir
 la $t0, array
 li $t3, 0    # j=0
 sub $t4, $t2, $t1 # Lim <- n-i

for_interno
 bege $t3, $t4, for_externo # si j = lim
 lw   $t5, 0($t0) # t5 <- arr[j]
 lw   $t6, 4($t0) # t6 <- arr[j+1]
 bgt  $t6, $t5, Nswap # si T6>T5 No camb
 sw   $t6, 0($t0)  # intercambio
 sw   $t5, 4($t0)

Nswap
 addi $t3, $t3, 1   # j++
 addi $t0, $t0, 4 # sg elemento
j for_interno

Reset2:
 La $t0, array
 Li $t1, 0
```

```
mostrar:                    #imprimir arr ordenado
  beq $t1, $t2, exit
  lw $a0, 0($t0)
  li $v0, 1
  syscall
  li $v0, 4
  la $a0, esp
  syscall
  addi $t0, $t0, 4
  addi $t1, $t1, 1
j mostrar


exit
  li $v0, 10
  syscall
```