.data

arr: .word 8 7 6 5 4 2 3 1

N: .word 8

.text

auipc x10 65536

addi x10 x10 0

lw x11 N

jal x1 B\_SORT

addi x5 x0 1

beq x0 x0 quit

B\_SORT:

addi x6 x0 2

blt x11 x6 return

addi x2 x2 -4

sw x1 0(x2)

addi x31 x0 2

sll x9 x11 x31

addi x9 x9 -4

add x9 x10 x9

addi x8 x10 0

loop:

beq x8 x9 exit

lw x12 0(x8)

lw x13 4(x8)

bge x13 x12 continue

sw x12 4(x8)

sw x13 0(x8)

continue:

addi x8 x8 4

beq x0 x0 loop

exit:

addi x11 x11 -1

jal x1 B\_SORT

lw x1 0(x2)

addi x2 x2 4

return:

jalr x0 x1 0

quit: