```
# EXTENSION 2017-02-24
#------
.global resident
#-----
resident:
  nt $TIPO_RES
  ret
#-----
.global nonresident
#-----
nonresident:
  int $TIPO_NONRES
  ret
.global readCR3
              # returns che content of the CR3 register in %eax
#-----
readCR3:
  movq %cr3, %rax
  retq
# EXTENSION 2017-02-24
# SOLUTION 2017-02-24
  # fill IDT gate for IO_TIPO_CEDMAREAD interrupts
  # SOLUTION 2017-02-24
# SOLUTION 2017-02-24
#-----
                                # C++ implementation
.EXTERN c_cedmaread
#-----
a_cedmaread:
  .cfi_startproc
  .cfi_def_cfa_offset 40
  .cfi_offset rip, -40
  .cfi_offset rsp, -16
  cavallo_di_troia %rdx
                    # check destination buffer starting address
                    # check destination buffer length
  cavallo_di_troia2 %rdx %rsi
                    # call C++ implementation
  call c_cedmaread
                     # return from interrupt
  iretq
  .cfi_endproc
# SOLUTION 2017-02-24
```