E03

Some strange behavior occurs when trying to write data on pages whose no. is greater than 160, so in the exercise we will only write to pages from 0 to 159.

The first part is somewhat analogue to what we did in the previous exercise (the only difference is that we write the page number to the lowest address of each page).

In the second part we invoke the `swap_pages()` function. In this subroutine, we first disable paging by operating on the `cr0` register. Then, through the pointer `kernel_directory`, we access the table and the page associated with the page number provided as an argument of the function. Inside the page struct, we have the frame number, that is the only thing we have to modify. After having swapped the frames, we must re-enable paging.

The `kernel_directory` is organized as an array of 1024 tables, each one containing an array of 1024 pages. The structure is summarized here: