

Lab 4.2

Write another file `main1.c` that modifies the previous one

Writes the page number, **multiplied by 3**, on the first address of each page

- Prints the content of the content of the first address of all mapped pages (the number information is the one derived from previous main). Ex.:

```
prrt 0x0 (page 0) contains 0
prrt 0x1000 (page 1) contains 3
prrt 0x2000 (page 2) contains 6
.. .. .. .. ..
```

Debug this kernel, modifying **entry 5** of the page table to be not present.

Breakpoint at function `page_fault` to follow what checks it performs, and what it prints.

In `ddd` command window, you can see the content of variables using command:

- `p var`
- `x/format &var` (or `x/x 0xabcd` for an address)
where the `format` can be [number] x for hexadecimal, c for characters etc.
- you can select the variable and have it shown in the data window.

You can modify the content of a variable in `ddd` using

- `p var=newvalue`
- you can select a variable shown in the data window, and modify its value

Produce a report that illustrates the data structure of the directory page table and page table, and the values of a few entries in that tables.

Use figures and tables to make your report easily readable.