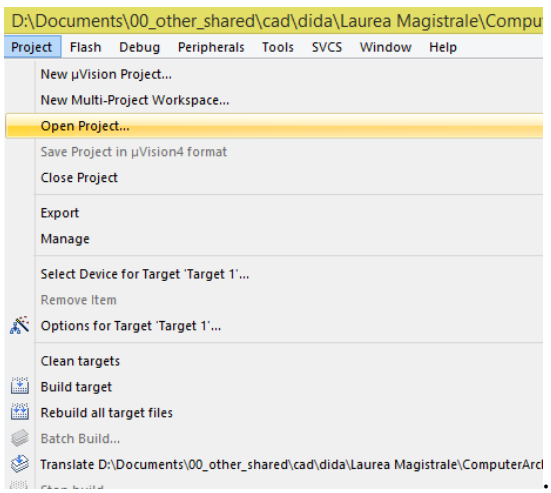
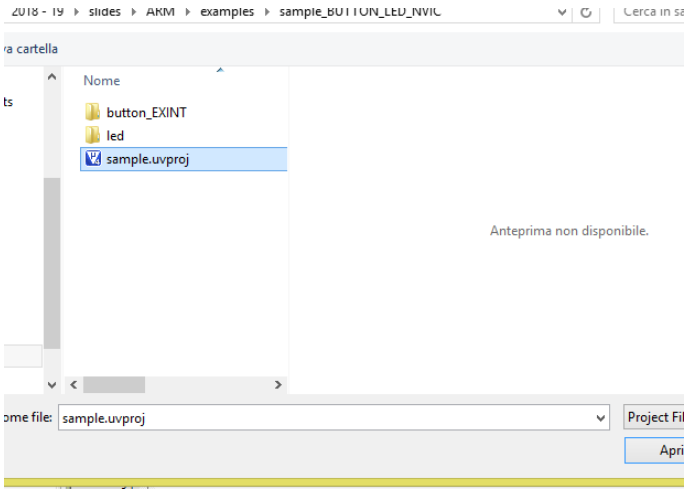
Computer Architectures **02LSEOV 02LSEOQ [AA-LZ]**	Delivery date: Thursday 20/12
Laboratory **9**	Expected delivery of lab_09.zip must include: - zipped project folder of the exercise 1

Solve the following problem by starting from the *sample_BUTTON_LED* project (open the file project from the uVision menu)





Exercise 1) Create a circular illumination system on the LANDTIGER board using the board LEDs. The system starts having only LED11 ON, then using the board buttons change the turned ON LED to the left and right according to the pressed button.

Modify the *sample_BUTTON_LED* project to perform the following functionalities on the LANDTIGER board.

- At the boot time, the LED11 is switched ON
- During the runtime, a button pressure turns OFF the LED currently ON, while turning ON the next LED to the left or right according to the pressed button.
    - KEY1: moves to the LEFT (←) the LED ON.
    - KEY2: moves to the RIGHT (→) the LED ON.
    - INT0: returns to reset configuration (LED11 ON)

Note that, the LED ON should behave as a circular system; then, when LED11 is ON, a pressure of KEY2 (→) switches ON the LED4 as shown in the last picture; in the same way, if LED4 is ON, a pressure of KEY1 (←) switches ON the LED11.

HINT: It could be useful to use a global variable in order to keep the information about turned ON LED. For example, using a similar variable than the "`unsigned char led_value`", already available in the project.

At BOOT

KEY1 pressed

KEY1 pressed
other 2 times

KEY2 pressed

INT0 pressed

KEY2 pressed