

Our program should be able to:

- A) Ask the user for his last name, through the serial interface UART.
- B) If the last letter of the given name is a vowel, an ISR (Interrupt Service Routine) will be called, which will change the color of the LED to red.
- C) If the last letter of the given name is a consonant, an ISR (Interrupt Service Routine) will be called, which will change the color of the LED to green.
- D) If the user's button is pushed an ISR (Interrupt Service Routine) will be called, which will change the color of the LED to blue.
- E) If the user's button is pushed while the LED's color is already blue, an ISR (Interrupt Service Routine) will be called, which will turn off the LED.

In every case, our program should inform the user about the change in the LED's state, through the serial interface UART.