If you go to:  
..\share\emblocks\debuggers\Interfaces\stlink\interface.script  
  
Change:   
  
CODE: SELECT ALL  
  
(snip)  
 //===========================================================================  
 //========== command line arguments  
 string = \_T("-S"); // Shutdown after disconnect  
  
(snip)  
  
  
  
to  
  
CODE: SELECT ALL  
  
(snip)  
 //===========================================================================  
 //========== command line arguments  
 string = \_T("-S"); // Shutdown after disconnect  
 string.Add( \_T(" -p 4241") );  
  
(snip)

////////////////////////////////////////////////////////////////////////////////////////////////////////////////

<http://www.emblocks.org/web/downloads-main/file/2-emblocks-ide>

<http://www.st.com/content/ccc/resource/technical/document/datasheet/30/91/86/2d/db/94/4a/d6/DM00102166.pdf/files/DM00102166.pdf/jcr:content/translations/en.DM00102166.pdf>

<http://www.st.com/web/en/resource/technical/document/reference_manual/DM00096844.pdf>

<http://www.st.com/content/ccc/resource/technical/document/programming_manual/6c/3a/cb/e7/e4/ea/44/9b/DM00046982.pdf/files/DM00046982.pdf/jcr:content/translations/en.DM00046982.pdf>

/////////////////////////////////////////////////////////////////////

1. Read carefully the code from "ADC example" and understand how the measurement is done. Test it!!! Think about other kind of measurements and write all you know.

2. Combine the code for IO usage from "[Blinky with HAL](http://visteon.bg/EngineeringAcademy/mod/resource/view.php?id=97)" and "ADC example". Let all LEDs light.

3. Write logic to implement the following:

3.a) Define fixed interval for the LED cycle.

3.b) Define minimum on time for the LEDs.

3.c) Implement logic to variate the time in which the LEDs are ON, depending of the ambient light. If the light is at minimum the LEDs should be lit for "Minimum on time". If the Light is at the maximum the LEDs should be on the whole time (or for max on time). All values in between should be linearly interpolated.

Upload a zip with your project.

Links Visited:

1. Tons of YouTube
2. <http://www.st.com/content/st_com/en/products/evaluation-tools/product-evaluation-tools/mcu-eval-tools/stm32-mcu-eval-tools/stm32-mcu-nucleo/nucleo-f401re.html>
3. <http://www.st.com/content/ccc/resource/technical/document/user_manual/98/2e/fa/4b/e0/82/43/b7/DM00105823.pdf/files/DM00105823.pdf/jcr:content/translations/en.DM00105823.pdf>
4. <http://datasheet.octopart.com/SFH203P-Osram-datasheet-638733.pdf>
5. <http://www.st.com/content/ccc/resource/technical/document/datasheet/30/91/86/2d/db/94/4a/d6/DM00102166.pdf/files/DM00102166.pdf/jcr:content/translations/en.DM00102166.pdf>
6. <http://www.st.com/content/ccc/resource/technical/document/programming_manual/6c/3a/cb/e7/e4/ea/44/9b/DM00046982.pdf/files/DM00046982.pdf/jcr:content/translations/en.DM00046982.pdf>