

PROBLEM STATEMENT-1

Using vsd_squadron_minifpga_4 FPGA board Toggle blue only blue LED from the available on-board RGB LED for every 1000ms.

SPECIFICATIONS:

PIN Description

Blue
Green
Red

PIN No

41
40
39

Results:

BLUE LED TURNS ON FOR EVERY
1000ms

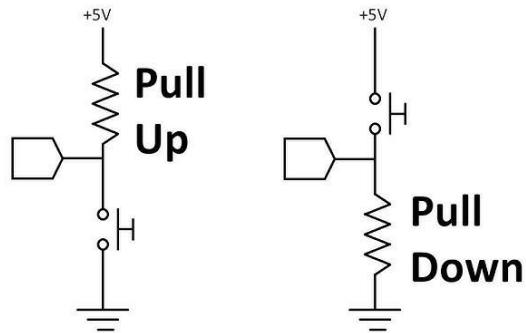


BLUE LED TURNS OFF FOR EVERY
1000ms



PROBLEM STATEMENT-2

Using vsd_squadron_minifpga_4 FPGA board and the below given pull up or pull down network fig, design a model such that blue light is emitted when the push button is in OFF state else red light must be emitted.



SPECIFICATIONS:

PIN Description

Blue
Red

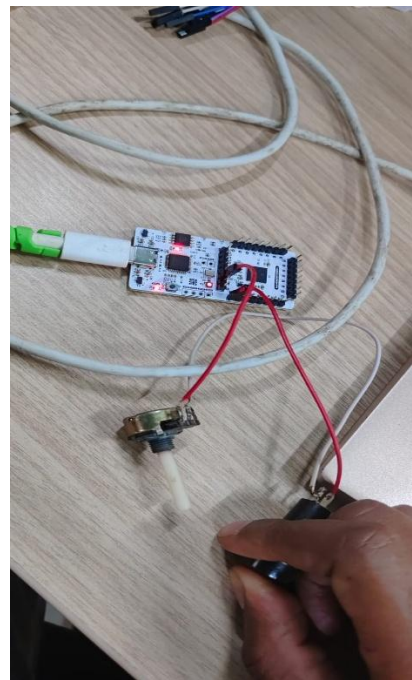
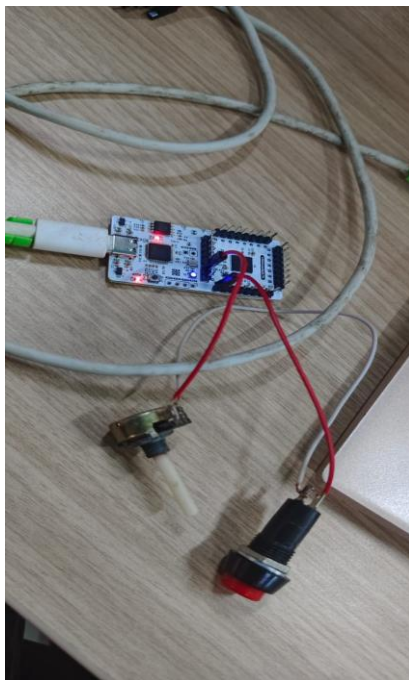
PIN No

41
39

Results:

BLUE LED TURNS ON FOR OFF STATE

RED LED TURNS ON FOR ON STATE



PROBLEM STATEMENT-3

Using vsd_squadron_minifpga_4 FPGA board print an 8-bit character using UART communication.

Results:



PROBLEM STATEMENT-4

Using vsd_squadron_minifpga_4 FPGA board design an automatic water controller system showing three levels corresponding to red, green, and blue LEDs. Pump should be turned ON when the third input goes down until it fills all the levels.

SPECIFICATIONS:

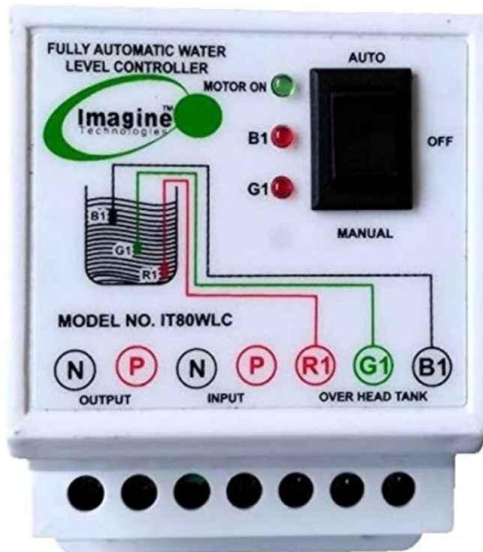
PIN Description

Blue
Green
Red
Input pins

PIN No

41
40
39
Assuming 27, 28, 31

REFERENCE MODEL:



Using these references and the uploaded code, we can build the system,