

## GPIO\_Led\_Button\_Problems

1. Write a c program to turn on led when we press the switch and turn off the led when we released the switch

Take Input pin PC9 and Output pin PA8

2. Write a c program to turn on Led when we press the switch and turn off Led if again we press the switch

Take Input pin PC9 and Output pin PA8

3. write a program to turn on 3 led using 3 switch conditions :

if we press 1st switch 1st led turn on then off.

if we press 2nd switch 2nd led turn on then off.

if we press 3rd switch 3rd led turn on then off.

Take PA7, PA8 and PA9 as output pin.

PB8, PB9 and PC9 as input pin.

4. write a program to turn on 3 led using 3 switch. conditons :

if we press the 1st switch 1st led turn on

if we press the 2nd switch 1st and 2nd led turn on

if we press the 3rd switch 1st,2nd and 3rd led turn on

Take PA7, PA8 and PA9 as output pin.

PB8, PB9 and PC9 as input pin.

5. Two switch and one led condition :

if we press the 1st switch led will turn on.

if we press the 2nd switch led will turn off.

Take PA7 as output pin

PB8 and PB9 as input pin

6. write a program using 3 led and 1 switch conidtion :

if we press the switch 1st time 1st led will turn on.

if we press the switch 2nd time 2nd led will turn on.

if we press the switch 3rd time 3rd led will turn on.

after releasing switch leds will be in off state.

also show the num of times switch pressed.

Take PA7, PA8 and PA9 as output pin.

PB8 as input pin.

7. write a program using 3 led and 1 switch

condition :

if we press the switch 1st time 1st led will turn on.

if we press the switch 2nd time 2nd led will turn on.

if we press the switch 3rd time 3rd led will turn on.

after releasing switch led state will not change.

also show the num of times switch pressed.

Take PA7, PA8 and PA9 as output pin.

PB8 as input pin.

8. Write a Program using 1 led and 1 switch

conditions:

if we press the switch 1st time led will toggle 1 time

if we press the switch 2nd time led will toggle 2 times.

if we press the switch 3rd time led will toggle 3 times.

and this should be in a loop.

also print the number of times switch pressed.

Take onboard led and switch.

9. Write a Program using 2 leds and 1 switch

conditions:

if we press the switch 1st time led1 will toggle 1 time and led2 toggle 3 times.

if we press the switch 2nd time led1 will toggle 2 time and led2 toggle 6 times.

if we press the switch 3rd time led1 will toggle 3 time and led2 toggle 9 times.

and this should be in a loop.

also print the number of times switch pressed.

Take onboard switch , led (PA5) and PA7.

10. Write a Program using 1 led and 1 switch

conditions:

if we press the switch 1st time led will turn on and

print LED ON in SWV ITM Data Console.

if we press the switch 2nd time led will turn off and

print LED OFF in SWV ITM Data Console

and this should be in a loop.

after releasing switch led state will not change.

also print the number of times switch pressed.

Take onboard led and switch.

11. Write a Program using 2 leds and 1 switch

conditions:

if we press the switch 1st time 1st led ON and 2nd led OFF

if we press the switch 2nd time 1st led ON and 2nd led OFF

and this should be in loop.

after releasing switch led state will not change.

print on SWV ITM Data Console:

number of times switch pressed.

led1 and led2 state.

Take onBoard led and switch and external led PB7.