Task 1   LED BLINK OPERATION USING PUSH

01.03.2022   BUTTON

Problem definition:

      The Blink operation is developed using push-button when the button is clicked, the voltage is high, LED turns on and if the voltage is low, LED turns off. This process is repeated for every click of the push-button. This process is constructed using Intel Galileo board.
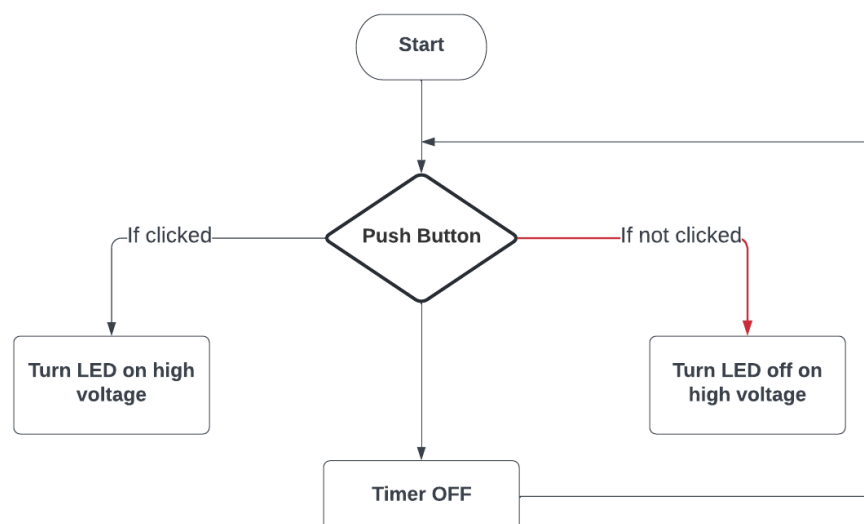
Tools used:

      Software - Arduino

      Hardware - Push button, LED

      Board - Intel Galileo

Sensor Description:

      The sensors are connected to 2 digital pins, and through a simple diode OR gate, to IRQ2. Each blink generates an external interrupt that wakes the node up, increments the correct counter according to the pins currently high and goes back to sleep.

Flowchart:

Source Code:

```
void setup() {

  // initialize digital pin LED_BUILTIN as an output.

  pinMode(LED_BUILTIN, OUTPUT);

}

// the loop function runs over and over again forever

void loop() {

  digitalWrite(LED_BUILTIN, HIGH);   // turn the LED on (HIGH is the voltage level)

  delay(1000);                       // wait for a second

  digitalWrite(LED_BUILTIN, LOW);    // turn the LED off by making the voltage LOW

  delay(1000);                       // wait for a second

}
```

Sample input and output:

LED blinks when the push button is clicked.

Real time Applications:

1. LED blinking circuit can be used as vehicle indicator when it is broke down in the middle of the road.

2. It can be used in operation theaters or offices as an indication that you are engaged in work.

Conclusion:

Hence, Blink operation is done using push-button and LED light in Intel Galileo board.