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xtomes07 Update README.md



👤 1 contributor

☰ 69 lines (48 sloc) | 1.78 KB

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[My Digital-electronics-2 GitHub repository](#)

Blink example

1. What is the meaning of the following binary operators in C?

- | OR
- & AND
- ^ XOR
- ~ NOT
- << binární posun vlevo
- >> binární posun doprava

2. Complete truth table with operators: | , & , ^ , ~

b	a	b or a	b and a	b xor a	not b
0	0	0	0	0	1
0	1	1	0	1	1
1	0	1	0	1	0
1	1	1	1	0	0

Morse code

1. Listing of C code with syntax highlighting which repeats one "dot" and one "comma" on a LED:

```
int main(void)
{
    // Set pin as output in Data Direction Register
    // DDRB = DDRB or 0010 0000
    DDRB = DDRB | (1<<LED_GREEN);

    // Set pin LOW in Data Register (LED off)
    // PORTB = PORTB and 1101 1111
    PORTB = PORTB & ~(1<<LED_GREEN);

    // Infinite loop
    while (1)
    {
        // Pause several milliseconds
        _delay_ms(SHORT_DELAY);

        PORTB = PORTB ^ (1<<LED_GREEN);    //LED ON -krátká doba pro tečku
        _delay_ms(SHORT_DELAY);

        PORTB = PORTB ^ (1<<LED_GREEN);    //LED OFF
        _delay_ms(SHORT_DELAY);

        PORTB = PORTB ^ (1<<LED_GREEN);    //LED ON - dlouhá doba pro čárku
        _delay_ms(3*SHORT_DELAY);

        PORTB = PORTB ^ (1<<LED_GREEN);    //LED OFF
        _delay_ms(SHORT_DELAY);

    }

    // Will never reach this
    return 0;
}
```

2. Scheme of Morse code application, i.e. connection of AVR device, LED, resistor, and supply voltage. The image can be drawn on a computer or by hand. Always name all components and their values!

