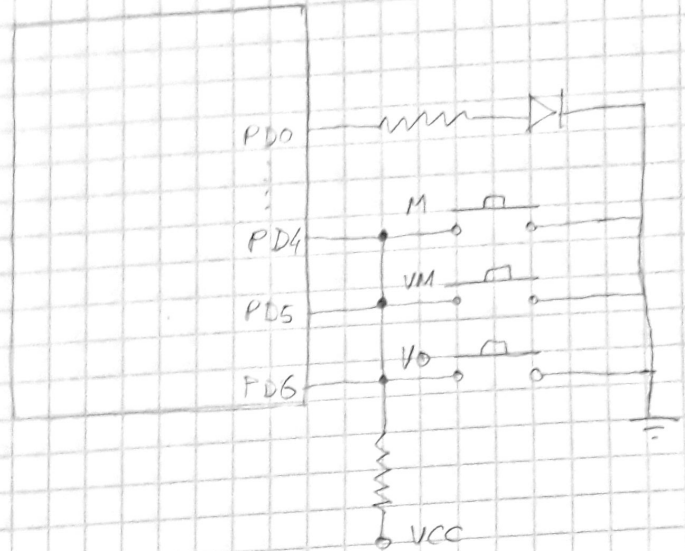


## Problema 3

1.



2. # include &lt;avr/io.h&gt;

# define RUN 0

# define SET 1

# define DELAY 100

# define PM 4

# define PVM 5

# define PVO 6

unsigned char vh, vm, vs

unsigned char

int main() {

unsigned char cnt = 0, status = SET;

TCCR1B = 0b00001011;

TCCR1A = 0b00000000;

OCR1A = 40845-1;

vh = vm = vs = 0;

DDRA = DDRB = DDRC = 0xFF;

DDRC = 0xF0;

showtime()

while (1)

DRAGHICI  
BOGDAN

if (cnt == DELAY) {

cnt = 0;  
Δa = Δm;

Δm = PIND;

switch (status) {

case SET:

if (!(Δm & 1 << PVM) && (Δa & 1 << PVM))

Δm = (Δm + 1) % 56;

if (!(Δm & 1 << PVH) && (Δa & 1 << PVH))

Δh = (Δh + 1) % 16;

if (!(Δm & 1 << PM) && (Δa & 1 << PM)) {

TCCR1B = 0b00001011;

TCCR1A = 0b00000000;

TCNT1 = 0;

status = RUN;

}

case RUN:

if (!(Δm & 1 << PM) && (Δa & 1 << PM)) {

TCCR1B = 0b00000000;

status = SET; TIFR1 = 1 << OCF1A;

OS = 0;

showtime();

}

} // end switch

} // end if

if (TIFR1 & 1 << OCF1A) {

TIFR1 = 1 << OCF1A;

OS ++;

```

if (vs == 64) {
    vs = 0;
    vm ++;
    if (vm == 56) {
        ch ++;
        vn = 0;
        if (ch == 16)
            rh = 0;
        }
    }
}

```

showtime();

} // end if  
cnt ++;  
} // end while

} // end main