

• Deney 11 •

Amel GITALI
201803010

1. Ödev

```
#include <16f877A.h>
#define HS, NoCDT, NOPROTECT
#define delay (clock = 4000000)
#define buton-1 pin_A0
#define buton-2 pin_A1

const int iler-digiti[4] = {0x03, 0x06, 0x0C, 0x09};
int iler = 0;
const int geri-digiti[4] = {0x09, 0x06, 0x03, 0x0C};
int geri = 0;
int ki, js, adim = 0;

void buton() {
    if (input(buton-1)) {
        iler = 1;
        geri = 0;
    }
    if (input(buton-2)) {
        iler = 0;
        geri = 1;
    }
}
```



```

void delay_button() {
    for(int t=0; t<1000; t++)
    {
        button();
        delay_ms(10);
    }
}

void main() {
    set_tris_a(0xFF);
    set_tris_c(0x00);
    output_c(0x00);
    while(1) {
        button();
        while(ileri==1 && seri==0) {
            for(i=0; i<2; i++)
            {
                for(k=0; k<4; k++) {
                    adim = (adim + 1) % 4;
                    output_c(ileri-digit[adim]);
                    delay_button();
                    if(seri==1 && ileri==0)
                        break;
                }
                ileri=0;
            }
            while(ileri==0 && seri==1)
            {
                for(y=0; y<2; y++) {
                    adim = (adim - 1) % 4;
                    output_c(ileri-digit[adim]);
                    delay_button();
                }
            }
        }
    }
}

```



```

if (seri == 0 && ileri == 1)
    break; }
if (seri == 0 && ileri == 1)
    break;
} seri = 0; }

```

Örnek 2

```

#include <16F877A.h>
#include HS, NandT, NOPROTECT
#define delay (clock = 1000000)

#define button_start_stop PIN_A3
#define button_way PIN_A2
#define button_speed_up PIN_A0
#define button_speed_down PIN_A1

```

```

const int digit[4] = {0x03, 0x06,
0x0C, 0x09};

```

```

int start = 0;
int way = 0;
int speed = 10;
int x = 0;
int a, i, k, u;

```

```

void start_stop() {
if (input(button_start_stop)) {
    x += 1; }
while (input(button_start_stop));
start = x % 2;
if (start == 10) start = 0;
}

```



```

void change-speed () {
    if (input (button-speed-up) {
        speed += 5;
        while (input (button-speed-up));
    }
    if (input (button-speed-down) {
        speed -= 5;
        while (input (button-speed-down));
    }
}

```

```

void change-way () {
    if (input (button-way))
        w = 1;
    while (input (button-way));
    way = w % 2;
    if (way == 1)
        way = 0;
}

```

```

void delay-button ()
{
    for (k = 0; k < 5; k++)
    {
        start-stop();
        change-way();
        change-speed();
        delay-ms (speed);
        if (start == 0)
            break;
    }
}

```



```

void main() {
    set-tris-a(0xFF);
    set-tris-c(0x00);
    output-c(0x00);
    while (1) {
        start-stop();
        change-way();
        change-speed();
        while (start == 1) {
            for (a=0; a<4; a++) {
                if (way == 0) {
                    i = (i+1)%4;
                }
                if (way == 1) {
                    i = (i-1)%4;
                }
                output-c(digit[i]);
                delay-button();
                if (start == 0) break;
            }
        }
    }
}

```

```

start-stop();
change-way();
if (start == 0)
    break;
} } }

```