



Ex3-ShowNumber

```

on start
  led enable false
  set I2C_Addr to 112
  set cmd_oscON to 33
  set cmd_dsp to 128
  set cmd_dimmer to 224
  set dsp_data to 0
  set blink_data to 0
  set data_dim to 0
  call Init_Ht16k33
  call Clr_DSP 0
  pause (ms) 100
  array of
    126
    129

```

```

forever
  call WrCha 2 num1
  call WrCha 9 num2
  change num2 by 1
  if num2 > 9 then
    set num2 to 0
    change num1 by 1
    if num1 > 9 then
      set num1 to 0
    +
    +
  pause (ms) 500

```

```

function Init_Ht16k33
  i2c write number
  at address I2C_Addr
  with value cmd_oscON
  of format Int8LE
  repeated false
  call DSP_Blink 0
  call DSP_Dimmer 15
  pause (ms) 100

```



```
function WrCha x num
  set cm to x
  set ch to num
  set ch to ch x 5
  repeat 5 times
  do
    call Wr_Byte cm NumCode get value at ch
    change cm by 1
    change ch by 1
```

```
function Wr_Byte Px Bdata
  if Px > 7 then
    set RamAddr to Px x 2 - 15
  else
    set RamAddr to Px x 2
  set Raddr_data to RamAddr x 256
  set Raddr_data to Raddr_data + Bdata
  i2c write number
  at address I2C_Addr
  with value Raddr_data
  of format UInt16BE
  repeated false
```



```
function Clr_DSP bkg
  set ram to 0
  repeat 16 times
  do
    set Raddr_data to ram x 256
    set Raddr_data to Raddr_data + bkg
    i2c write number
    at address I2C_Addr
    with value Raddr_data
    of format UInt16BE
    repeated false
    change ram by 1
```

```
function DSP_OFF
  set dsp_data to cmd_dsp + blink_data
  i2c write number
  at address I2C_Addr
  with value dsp_data
  of format Int8LE
  repeated false
```



```
function DSP_ON  
  set dsp_data to cmd_dsp + blink_data + 1  
  i2c write number  
  at address I2C_Addr  
  with value dsp_data  
  of format Int8LE  
  repeated false
```

```
function DSP_Dimmer dim  
  set data_dim to cmd_dimmer + dim  
  i2c write number  
  at address I2C_Addr  
  with value data_dim  
  of format Int8LE  
  repeated false
```