

نمونه کد راه اندازی ماژول با آردوینو و بسکام

نمونه کد راه اندازی ماژول سون سگمنت با arduino

```
//M365 74HC595 8-DIGIT SEVEN SEGMENT DRIVER  
//M.OMIDVAR SHIRAZ-IRAN-2016  
//WEBLOG: http://mtronics.ir  
//SHOP: http://iecshop.ir  
//PHONE: +98 935 318 1040
```

```
int dataPin = 2;//DIO  
int latchPin = 3;//SCLK  
int clockPin = 4;//RCLK  
const byte ARRAY_SIZE = 35;  
byte segment_codes[ARRAY_SIZE];  
String available_chars[ARRAY_SIZE];  
String s1;String s2;String s3;String s4;  
String s5;String s6;String s7;String s8;  
boolean degree;boolean clockdot;
```

```
void setup() {  
  available_chars[0] = "0";  
  available_chars[1] = "1";  
  available_chars[2] = "2";  
  available_chars[3] = "3";  
  available_chars[4] = "4";  
  available_chars[5] = "5";  
  available_chars[6] = "6";  
  available_chars[7] = "7";  
  available_chars[8] = "8";  
  available_chars[9] = "9";  
  available_chars[10] = "A";  
  available_chars[11] = "b";  
  available_chars[12] = "D";  
  available_chars[13] = "c";  
  available_chars[14] = "d";  
  available_chars[15] = "E";  
  available_chars[16] = "F";  
  available_chars[17] = "H";  
  available_chars[18] = "h";  
  available_chars[19] = "L";  
  available_chars[20] = "n";  
  available_chars[21] = "I";  
  available_chars[22] = "O";
```

```
available_chars[23] = "o";
available_chars[24] = "P";
available_chars[25] = "S";
available_chars[26] = " ";
available_chars[27] = "-";
available_chars[28] = "u";
available_chars[29] = "J";
available_chars[30] = "_";
available_chars[31] = "g";
available_chars[32] = "r";
available_chars[33] = "t";
available_chars[34] = "y";
```

```
segment_codes[0]=0b11000000;
segment_codes[1]=0b11111001;
segment_codes[2]=0b10100100;
segment_codes[3]=0b10110000;
segment_codes[4]=0b10011001;
segment_codes[5]=0b10010010;
segment_codes[6]=0b10000011;
segment_codes[7]=0b11111000;
segment_codes[8]=0b10000000;
segment_codes[9]=0b10011000;
segment_codes[10]=0b10001000;
segment_codes[11]=0b10000011;
segment_codes[12]=0b11000110;
segment_codes[13]=0b10100111;
segment_codes[14]=0b10100001;
segment_codes[15]=0b10000110;
segment_codes[16]=0b10001110;
segment_codes[17]=0b10001001;
segment_codes[18]=0b10001011;
segment_codes[19]=0b11000111;
segment_codes[20]=0b10101011;
segment_codes[21]=0b11111001;
segment_codes[22]=0b11000000;
segment_codes[23]=0b10100011;
segment_codes[24]=0b10001100;
segment_codes[25]=0b10010010;
segment_codes[26]=0b11111111;
segment_codes[27]=0b10111111;
segment_codes[28]=0b11000001;
segment_codes[29]=0b11110001;
segment_codes[30]=0b11110111;
segment_codes[31]=0b10010000;
segment_codes[32]=0b10101111;
```

```
segment_codes[33]=0b10000111;  
segment_codes[34]=0b10010001;
```

```
pinMode(latchPin, OUTPUT);  
pinMode(clockPin, OUTPUT);  
pinMode(dataPin, OUTPUT);  
}
```

```
void loop() {
```

```
s1="1";s2="2";s3="3";s4="4";  
degree=0;//0=OFF - 1=ON  
clockdot=1;//0=OFF - 1=ON
```

```
//special config for M365 - FOUR DIGITS SEGMENT DRIVER  
if (clockdot==1) s5="8."; else s5=" "; // :on>>s5="8." :off>>s5=" "  
if (degree==1)s6="8."; else s6=" ";// degree-on>>s6="8." degree-off>>s6=" "  
show(" "+String(s6)+String(s5)+String(s4)+String(s3)+String(s2)+String(s1));  
//special config for M365 - FOUR DIGITS SEGMENT DRIVER  
}
```

```
void show(String value){  
  int skip = 0;  
  for(int i=0; i<value.length(); i++) {  
    // for(int i=value.length(); i>1; i--) {  
    if(!((String)value[i]).equals(".")) {  
      int indexOfCharToWrite = findIndexOfChar((String)value[i]);  
      if(indexOfCharToWrite > -1){  
        byte bitToWrite = 0;  
        digitalWrite(latchPin, LOW);  
        byte code = segment_codes[indexOfCharToWrite];  
        boolean skipNext = false;  
        if(((String)value[i+1]).equals(".")) {  
          bitWrite(code, 7, 0);  
          skipNext = true;  
        }  
        shiftOut(dataPin, clockPin, MSBFIRST, code);  
        bitWrite(bitToWrite, i-skip, 1);  
        shiftOut(dataPin, clockPin, LSBFIRST, bitToWrite);  
        digitalWrite(latchPin, HIGH);  
        if(skipNext){  
          skip++;  
        }  
      }  
    }  
  }  
}
```



```
For I = 0 To 3
For J = 0 To 2000
Sr = "03:14" : Gosub Show_temp_humid
Next J
For J = 0 To 2000
Sr = "0314" : Gosub Show_temp_humid
Next J
Next I
```

```
For J = 0 To 8000
Temp1 = -5.2
Head = Str(temp1)
Head = Format(head , "00.0")
Sr = Mid(head , 1 , 4) + "c" : Gosub Show_temp_humid
Next J
```

```
For I = 0 To 10000
Sr = "1.618" : Gosub Show_temp_humid
Next I
```

```
Loop
End
```

```
*****code numbers*****
```

```
Numbers:
```

```
Data 192 , 249 , 164 , 176 , 153 , 146 , 130 , 248 , 128 , 144 , 127 , 191 , 158
' ".""-" "c"
```

```
Dotplace:
```

```
Data 0 , 0 , 1 , 2 , 4 , 8 , 16 , 32 , 64 , 128 , 256
```

```
Segplace:
```

```
Data 0 , 1 , 2 , 4 , 8 , 16 , 32 , 64
```

```
Segnumber:
```

```
Data 1 , 2 , 4 , 8 , 16 , 32 , 64 , 128
```

```
*****
```

```
*****data to 7 segment*****
```

```
Timer_7seg:
```

```
Css = 0 : Shiftout Cds , Cclk , Anod , 1 , 16 : Css = 1
```

```
Return
```

```
*****mohsabe adad be 7segment*****
```

```
Show_temp_humid:
```

```
Dot = Charpos(sr , ".")
```

```
Seg = Lookup(dot , Dotplace) : Num = 127
```

```
Gosub Timer_7seg
Minus = Charpos(sr , "-")
Seg = Lookup(minus , Segplace) : Num = 191
Gosub Timer_7seg
Clock = Charpos(sr , ":")
Head = Mid(sr , 3 , 1)
If Head = ":" Then
Seg = 16 : Num = 127
Gosub Timer_7seg
Delchar Sr , Clock
End If
Delchar Sr , Dot
For _ch = 1 To 6
Esr = Mid(sr , _ch , 1)
If Esr = "-" Then Goto Nex1 : Num = Val(esr)
If Esr = "" Then : Seg = 32 : Num = 127
Delchar Sr , _ch
Gosub Timer_7seg
Decr _ch
Goto Nex1
End If
Cnt = _ch
Seg = Cnt - 1 : : Seg = 2 ^ Seg
Num = Lookup(num , Numbers)
If Esr = "c" Then Num = Lookup(12 , Numbers)
Gosub Timer_7seg
Nex1:
Next
Anod = &HFF00
Num = Lookup(127 , Numbers)
Gosub Timer_7seg
Return
```