

LAMPIRAN

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/******
```

```
This program was created by the  
CodeWizardAVR V2.60 Evaluation  
Automatic Program Generator
```

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http://www.hpinfotech.com
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```
Project :
```

```
Version :
```

```
Date : 5/3/2017
```

```
Author : Politeknik
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```
Company :
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Comments:
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```
Chip type : ATmega8535
```

```
Program type : Application
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```
AVR Core Clock frequency: 16.000000 MHz
```

```
Memory model : Small
```

```
External RAM size : 0
```

```
Data Stack size : 128
```

```
*****/
```

```
#include <mega8535.h>
```

```
#include <delay.h>
```

```
#define s1 PINB.1
```

```
#define s2 PINB.2
```

```
#define auto PINB.0
```

```
#define manual1 PINB.7
```

```
#define manual2 PINB.6
```

```
#define buzerp PORTD.0
```

```
#define buzern PORTD.1
```

```
#define relay PORTD.3
```

```
#define servo PORTC.0
```

```
int i;

void relay_aktif()
{
    relay=1;
    delay_ms(30);
    relay=0;
}

void alarm_aktif()
{
    buzerp=1;
    delay_ms(40);
    buzerp=0;
    delay_ms(30);
    buzerp=1;
    delay_ms(40);
    buzerp=0;
    delay_ms(30);
    buzerp=1;
    delay_ms(40);
    buzerp=0;
    delay_ms(30);
    buzerp=1;
    delay_ms(40);
    buzerp=0;
    delay_ms(30);
    buzerp=1;
    delay_ms(40);
    buzerp=0;
    delay_ms(30);
}
}
```

```
void alarm_mati()
{
buzerp=0;
buzern=0;
}

void main(void)
{
PORTB=0xF1;
DDRB=0x00;

PORTD=0x00;
DDRD=0xFF;

PORTC=0x00;
DDRC=0xFF;

TCCR0=0x00;
TCNT0=0x00;
OCR0=0x00;

TCCR1A=0x82;
TCCR1B=0x1B;
TCNT1H=0x00;
TCNT1L=0x00;
ICR1H=0x13;
ICR1L=0x87;
OCR1AH=0x00;
OCR1AL=0x00;
OCR1BH=0x00;
OCR1BL=0x00;
```

```
ASSR=0x00;
TCCR2=0x00;
TCNT2=0x00;
OCR2=0x00;

MCUCR=0x00;
MCUCSR=0x00;
TIMSK=0x00;
ACSR=0x80;
SFIOR=0x00;

while (1)
{
if (s1==1&&S2==0)
{
alarm_mati();
}
if (s1==0&&S2==1)
{
alarm_mati();
}
if (s1==1&&S2==1)
{
alarm_mati();
}
if (s1==0&&S2==0&&auto==1)
{
relay_aktif();
alarm_aktif();
}
}
```

```

// auto servo
if (s1==0&&S2==0&&auto==0)
{
  relay_aktif();
  for(i=0;i<=200;i++) //90 derajat
  {
    servo=1;
    delay_us(85);
    servo=0;
    delay_us(250);
  }
  alarm_aktif();
  {
    delay_ms(500);
  }
  for(i=0;i<=200;i++) //0 derajat
  {
    servo=1;
    delay_us(100);
    servo=0;
    delay_us(6);
  }

// manual servo
}

  if (manual2==0)
  {
    for(i=0;i<=200;i++) //90 derajat
    {
      servo=1;
      delay_us(85);
    }
  }

```

```
servo=0;
delay_us(250);
}
}
if (manual1==0)
{
for(i=0;i<=200;i++) //0 derajat
{
servo=1;
delay_us(100);
servo=0;
delay_us(6);
}
}
};
}
```