

; PicBasic Pro Compiler 2.46, www.elec4u.ir (c) 1998, 2005 microEngineering Labs, Inc. All Rights Reserved.

PM_USED EQU 1

INCLUDE "16F877.INC"

; Define statements.

#define CODE_SIZE 8

#define OSC 20 ;Kristal 20 MHz www.elec4u.ir

RAM_START EQU 00020h

RAM_END EQU 001EFh

RAM_BANKS EQU 00004h

BANK0_START EQU 00020h

BANK0_END EQU 0007Fh

BANK1_START EQU 000A0h

BANK1_END EQU 000EFh

BANK2_START EQU 00110h

BANK2_END EQU 0016Fh

BANK3_START EQU 00190h

BANK3_END EQU 001EFh

EEPROM_START EQU 02100h

EEPROM_END EQU 021FFh

R0 EQU RAM_START + 000h

R1 EQU RAM_START + 002h

R2 EQU RAM_START + 004h

R3 EQU RAM_START + 006h

R4 EQU RAM_START + 008h

R5 EQU RAM_START + 00Ah

R6 EQU RAM_START + 00Ch

R7 EQU RAM_START + 00Eh

R8 EQU RAM_START + 010h

FLAGS EQU RAM_START + 012h

GOP EQU RAM_START + 013h

RM1 EQU RAM_START + 014h

RM2 EQU RAM_START + 015h

RR1 EQU RAM_START + 016h

RR2 EQU RAM_START + 017h

_A EQU RAM_START + 018h

_DEGER EQU RAM_START + 019h

_SAY1 EQU RAM_START + 01Ah

_SAY2 EQU RAM_START + 01Bh

_SAY3 EQU RAM_START + 01Ch

_SAYI EQU RAM_START + 01Dh

_VEZNE EQU RAM_START + 01Eh

_X EQU RAM_START + 01Fh

_Y EQU RAM_START + 020h

_PORTL EQU PORTB

_PORTH EQU PORTC

_TRISL EQU TRISB

_TRISH EQU TRISC

#define _GIRIS1 _PORTD_0

#define _GIRIS2 _PORTD_1

#define _GIRIS3 _PORTD_2

```
#define _SEC1                _PORTC_0
#define _SEC2                _PORTC_1
#define _SEC3                _PORTC_2
#define _SEC4                _PORTC_3
#define _SEC5                _PORTC_4
#define _SEC6                _PORTC_5
#define _PORTD_0             PORTD, 000h
#define _PORTD_1             PORTD, 001h
#define _PORTD_2             PORTD, 002h
#define _PORTC_0             PORTC, 000h
#define _PORTC_1             PORTC, 001h
#define _PORTC_2             PORTC, 002h
#define _PORTC_3             PORTC, 003h
#define _PORTC_4             PORTC, 004h
#define _PORTC_5             PORTC, 005h

; Constants.
_SURE1                      EQU 00002h
_SURE2                      EQU 00003h
    INCLUDE "ANA_CP~1.MAC"
    INCLUDE "PBPPIC14.LIB"

    MOVE?CB 000h, TRISB
    MOVE?CB 000h, TRISC
    MOVE?CB 007h, TRISD

    ASM?
DEVICE pic16F877

    ENDASM?

    ASM?
DEVICE pic16F877, PWRT_ON

    ENDASM?

    ASM?
DEVICE pic16F877, WDT_ON

    ENDASM?

    ASM?
DEVICE pic16F877, PROTECT_OFF ;kod korumas yok

    ENDASM?

    ASM?
DEVICE pic16F877, XT_OSC      ;osilat_r kristal

    ENDASM?

    CLEAR?
    MOVE?CB 000h, PORTD
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MOVE?CB 000h, PORTB
MOVE?CB 000h, PORTC

LABEL?L _BASLA
MOVE?CB 000h, _X
LABEL?L L00005
CMPGT?BCL _X, 019h, L00006
SERIN2DPIN?T _GIRIS1
SERIN2MODE?C 0018Ch

LABEL?L L00001
SERIN2WAIT?CL 056h, L00001
SERIN2WAIT?CL 045h, L00001
SERIN2WAIT?CL 05Ah, L00001
SERIN2WAIT?CL 031h, L00001
SERIN2?B _SAYI
MOVE?CB 006h, _VEZNE
CALL?L _HESAP
GOSUB?L _GOSTER
NEXT?BCL _X, 001h, L00005
LABEL?L L00006
MOVE?CB 000h, _X
LABEL?L L00007
CMPGT?BCL _X, 019h, L00008
SERIN2DPIN?T _GIRIS2
SERIN2MODE?C 0018Ch

LABEL?L L00002
SERIN2WAIT?CL 056h, L00002
SERIN2WAIT?CL 045h, L00002
SERIN2WAIT?CL 05Ah, L00002
SERIN2WAIT?CL 032h, L00002
SERIN2?B _SAYI
MOVE?CB 05Bh, _VEZNE
CALL?L _HESAP
GOSUB?L _GOSTER
NEXT?BCL _X, 001h, L00007
LABEL?L L00008
MOVE?CB 000h, _X
LABEL?L L00009
CMPGT?BCL _X, 019h, L00010
SERIN2DPIN?T _GIRIS3
SERIN2MODE?C 0018Ch

LABEL?L L00003
SERIN2WAIT?CL 056h, L00003
SERIN2WAIT?CL 045h, L00003
SERIN2WAIT?CL 05Ah, L00003
SERIN2WAIT?CL 033h, L00003
SERIN2?B _SAYI
MOVE?CB 04Fh, _VEZNE
CALL?L _HESAP
GOSUB?L _GOSTER
NEXT?BCL _X, 001h, L00009
LABEL?L L00010
GOTO?L _BASLA

```

```

LABEL?L _GOSTER
MOVE?CB 000h, _X
LABEL?L L00011
CMPGT?BCL _X, 064h, L00012
MOVE?BB _SAY1, _Y
GOSUB?L _GONDER
MOVE?BB _DEGER, PORTB
MOVE?CT 001h, _SEC1
MOVE?CT 001h, _SEC2
MOVE?CT 000h, _SEC3
MOVE?CT 001h, _SEC4
MOVE?CT 001h, _SEC5
MOVE?CT 001h, _SEC6
PAUSE?C _SURE1
MOVE?CT 001h, _SEC3
PAUSE?C _SURE2
MOVE?BB _SAY2, _Y
GOSUB?L _GONDER
MOVE?BB _DEGER, PORTB
MOVE?CT 001h, _SEC1
MOVE?CT 000h, _SEC2
MOVE?CT 001h, _SEC3
MOVE?CT 001h, _SEC4
MOVE?CT 001h, _SEC5
MOVE?CT 001h, _SEC6
PAUSE?C _SURE1
MOVE?CT 001h, _SEC2
PAUSE?C _SURE2
MOVE?BB _SAY3, _Y
GOSUB?L _GONDER
MOVE?BB _DEGER, PORTB
MOVE?CT 000h, _SEC1
MOVE?CT 001h, _SEC2
MOVE?CT 001h, _SEC3
MOVE?CT 001h, _SEC4
MOVE?CT 001h, _SEC5
MOVE?CT 001h, _SEC6
PAUSE?C _SURE1
MOVE?CT 001h, _SEC1
PAUSE?C _SURE2
MOVE?BB _VEZNE, PORTB
MOVE?CT 001h, _SEC1
MOVE?CT 001h, _SEC2
MOVE?CT 001h, _SEC3
MOVE?CT 001h, _SEC4
MOVE?CT 001h, _SEC5
MOVE?CT 000h, _SEC6
PAUSE?C _SURE1
MOVE?CT 001h, _SEC6
PAUSE?C _SURE2
NEXT?BCL _X, 001h, L00011
LABEL?L L00012
RETURN?

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```

LABEL?L _HESAP
MOD?BCB _SAYI, 00Ah, _SAY1
MOD?BCB _SAYI, 064h, _A

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```
DIV?BCB _A, 00Ah, _SAY2
DIV?BCB _SAYI, 064h, _SAY3
RETURN?

LABEL?L _GONDER
LOOKUP?BCLB _Y, 00Ah, L00004, _DEGER
LURET?C 03Fh
LURET?C 006h
LURET?C 05Bh
LURET?C 04Fh
LURET?C 066h
LURET?C 06Dh
LURET?C 07Dh
LURET?C 007h
LURET?C 0FEh
LURET?C 06Fh

LABEL?L L00004
RETURN?
```

END