

15_pulsante_note

;Programma per far suonare sette note, della terza ottava, con un pulsante
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```
List P=PIC16F887
Include "p16F887.inc"
ERRORLEVEL -302
__config 0x2007, 0x20E4 ;0010 0000 1110 0100
__config 0x2008, 0x3EFF ;0011 1110 1111 1111
```

```
SEMIPERODO EQU 0X20
COUNT_L EQU 0X21
COUNT_H EQU 0X22
```

```
ORG 0x00
```

```
BSF STATUS, RP0
MOVLW 0X61
MOVWF OSCCON
MOVLW B'11111110'
MOVWF PORTC
BCF STATUS, RP0
```

MAINLOOP

```
DO BTFSS PORTC, 3
   GOTO DO
loop1 MOVLW d'191'
      MOVWF SEMIPERODO
      CALL GENERATORE
      BTFSC PORTC, 3
      GOTO loop1

RE BTFSS PORTC, 3
   GOTO RE
loop2 MOVLW d'170'
      MOVWF SEMIPERODO
      CALL GENERATORE
      BTFSC PORTC, 3
      GOTO loop2

MI BTFSS PORTC, 3
   GOTO MI
loop3 MOVLW d'152'
      MOVWF SEMIPERODO
      CALL GENERATORE
      BTFSC PORTC, 3
      GOTO loop3
```

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```
FA      BTFSS  PORTC, 3
        GOTO   FA
loop4   MOVLW  d'143'
        MOVWF  SEMIPERiodo
        CALL   GENERATORE
        BTFSC  PORTC, 3
        GOTO   loop4
```

```
SOL     BTFSS  PORTC, 3
        GOTO   SOL
loop5   MOVLW  d'128'
        MOVWF  SEMIPERiodo
        CALL   GENERATORE
        BTFSC  PORTC, 3
        GOTO   loop5
```

```
LA      BTFSS  PORTC, 3
        GOTO   LA
loop6   MOVLW  d'114'
        MOVWF  SEMIPERiodo
        CALL   GENERATORE
        BTFSC  PORTC, 3
        GOTO   loop6
```

```
SI      BTFSS  PORTC, 3
        GOTO   SI
loop7   MOVLW  d'101'
        MOVWF  SEMIPERiodo
        CALL   GENERATORE
        BTFSC  PORTC, 3
        GOTO   loop7
```

```
GOTO    MAINLOOP
```

```
GENERATORE  NOP
            BSF    PORTC, 0
            CALL   DELAY
            BCF    PORTC, 0
            CALL   DELAY
            RETURN
```

```
DELAY       MOVF   SEMIPERiodo, 0
            MOVWF  COUNT_L
LOOP1       MOVLW  2
            MOVWF  COUNT_H
LOOP2       DECFSZ COUNT_H, 1
            GOTO   LOOP2
```

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DECFSZ COUNT_L, 1
GOTO LOOP1
RETURN

END