

Programmation buzzer :

```
#include <Keypad.h>
#define C0 16.35
#define Db0 17.32
#define D0 18.35
#define Eb0 19.45
#define E0 20.60
#define F0 21.83
#define Gb0 23.12
#define G0 24.50
#define Ab0 25.96
#define LA0 27.50
#define Bb0 29.14
#define B0 30.87
#define C1 32.70
#define Db1 34.65
#define D1 36.71
#define Eb1 38.89
#define E1 41.20
#define F1 43.65
#define Gb1 46.25
#define G1 49.00
#define Ab1 51.91
#define LA1 55.00
#define Bb1 58.27
#define B1 61.74
#define C2 65.41
#define Db2 69.30
#define D2 73.42
#define Eb2 77.78
#define E2 82.41
#define F2 87.31
#define Gb2 92.50
#define G2 98.00
#define Ab2 103.83
#define LA2 110.00
#define Bb2 116.54
#define B2 123.47
#define C3 130.81
#define Db3 138.59
#define D3 146.83
#define Eb3 155.56
#define E3 164.81
#define F3 174.61
#define Gb3 185.00
#define G3 196.00
#define Ab3 207.65
#define LA3 220.00
#define Bb3 233.08
```

#define B3 246.94
#define C4 261.63
#define Db4 277.18
#define D4 293.66
#define Eb4 311.13
#define E4 329.63
#define F4 349.23
#define Gb4 369.99
#define G4 392.00
#define Ab4 415.30
#define LA4 440.00
#define Bb4 466.16
#define B4 493.88
#define C5 523.25
#define Db5 554.37
#define D5 587.33
#define Eb5 622.25
#define E5 659.26
#define F5 698.46
#define Gb5 739.99
#define G5 783.99
#define Ab5 830.61
#define LA5 880.00
#define Bb5 932.33
#define B5 987.77
#define C6 1046.50
#define Db6 1108.73
#define D6 1174.66
#define Eb6 1244.51
#define E6 1318.51
#define F6 1396.91
#define Gb6 1479.98
#define G6 1567.98
#define Ab6 1661.22
#define LA6 1760.00
#define Bb6 1864.66
#define B6 1975.53
#define C7 2093.00
#define Db7 2217.46
#define D7 2349.32
#define Eb7 2489.02
#define E7 2637.02
#define F7 2793.83
#define Gb7 2959.96
#define G7 3135.96
#define Ab7 3322.44
#define LA7 3520.01
#define Bb7 3729.31
#define B7 3951.07
#define C8 4186.01

```

#define Db8 4434.92
#define D8 4698.64
#define Eb8 4978.03
// DURATION OF THE NOTES
#define BPM 120 // you can change this value changing all the others
#define H 2*Q //half 2/4
#define Q 60000/BPM //quarter 1/4
#define E Q/2 //eighth 1/8
#define S Q/4 // sixteenth 1/16
#define W 4*Q // whole 4/4

int buzzer = 4;
int bouton2 = 5;

void setup() {
  pinMode(buzzer, OUTPUT);
  pinMode(bouton2,INPUT);
}

void loop() {
  Serial.println(digitalRead(bouton2));
  if(digitalRead(bouton2) == 1){
    //tone(pin, note, duration)
    tone(buzzer,LA3,Q);
    delay(1+Q); //delay duration should always be 1 ms more than the note in order to separate
    them.
    tone(buzzer,LA3,Q);
    delay(1+Q);
    tone(buzzer,LA3,Q);
    delay(1+Q);
    tone(buzzer,F3,E+S);
    delay(1+E+S);
    tone(buzzer,C4,S);
    delay(1+S);

    tone(buzzer,LA3,Q);
    delay(1+Q);
    tone(buzzer,F3,E+S);
    delay(1+E+S);
    tone(buzzer,C4,S);
    delay(1+S);
    tone(buzzer,LA3,H);
    delay(1+H);

    tone(buzzer,E4,Q);
    delay(1+Q);
    tone(buzzer,E4,Q);
    delay(1+Q);
    tone(buzzer,E4,Q);
    delay(1+Q);
  }
}

```

tone(buzzer,F4,E+S);
delay(1+E+S);
tone(buzzer,C4,S);
delay(1+S);

tone(buzzer,Ab3,Q);
delay(1+Q);
tone(buzzer,F3,E+S);
delay(1+E+S);
tone(buzzer,C4,S);
delay(1+S);
tone(buzzer,LA3,H);
delay(1+H);

tone(buzzer,LA4,Q);
delay(1+Q);
tone(buzzer,LA3,E+S);
delay(1+E+S);
tone(buzzer,LA3,S);
delay(1+S);
tone(buzzer,LA4,Q);
delay(1+Q);
tone(buzzer,Ab4,E+S);
delay(1+E+S);
tone(buzzer,G4,S);
delay(1+S);

tone(buzzer,Gb4,S);
delay(1+S);
tone(buzzer,E4,S);
delay(1+S);
tone(buzzer,F4,E);
delay(1+E);
delay(1+E);//PAUSE
tone(buzzer,Bb3,E);
delay(1+E);
tone(buzzer,Eb4,Q);
delay(1+Q);
tone(buzzer,D4,E+S);
delay(1+E+S);
tone(buzzer,Db4,S);
delay(1+S);

tone(buzzer,C4,S);
delay(1+S);
tone(buzzer,B3,S);
delay(1+S);
tone(buzzer,C4,E);
delay(1+E);
delay(1+E);//PAUSE QUASI FINE RIGA

tone(buzzer,F3,E);
delay(1+E);
tone(buzzer,Ab3,Q);
delay(1+Q);
tone(buzzer,F3,E+S);
delay(1+E+S);
tone(buzzer,LA3,S);
delay(1+S);

tone(buzzer,C4,Q);
delay(1+Q);
tone(buzzer,LA3,E+S);
delay(1+E+S);
tone(buzzer,C4,S);
delay(1+S);
tone(buzzer,E4,H);
delay(1+H);

tone(buzzer,LA4,Q);
delay(1+Q);
tone(buzzer,LA3,E+S);
delay(1+E+S);
tone(buzzer,LA3,S);
delay(1+S);
tone(buzzer,LA4,Q);
delay(1+Q);
tone(buzzer,Ab4,E+S);
delay(1+E+S);
tone(buzzer,G4,S);
delay(1+S);

tone(buzzer,Gb4,S);
delay(1+S);
tone(buzzer,E4,S);
delay(1+S);
tone(buzzer,F4,E);
delay(1+E);
delay(1+E);//PAUSE
tone(buzzer,Bb3,E);
delay(1+E);
tone(buzzer,Eb4,Q);
delay(1+Q);
tone(buzzer,D4,E+S);
delay(1+E+S);
tone(buzzer,Db4,S);
delay(1+S);

tone(buzzer,C4,S);
delay(1+S);
tone(buzzer,B3,S);

```
delay(1+S);
tone(buzzer,C4,E);
delay(1+E);
delay(1+E);//PAUSE QUASI FINE RIGA
tone(buzzer,F3,E);
delay(1+E);
tone(buzzer,Ab3,Q);
delay(1+Q);
tone(buzzer,F3,E+S);
delay(1+E+S);
tone(buzzer,C4,S);
delay(1+S);
```

```
tone(buzzer,LA3,Q);
delay(1+Q);
tone(buzzer,F3,E+S);
delay(1+E+S);
tone(buzzer,C4,S);
delay(1+S);
tone(buzzer,LA3,H);
delay(1+H);
```

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delay(2*H);
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}
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