

```

1 //=====
2 // Step 08-1
3 // Beep do re mi fa so la si do
4 // JP2 (2-3) / JP3 (2-3) / JP4 (2-3) / JP5 (2-3) / JP6 (2-3)
5 // JP7 (2-3) Beep
6 //=====
7
8 #include "mbed.h"
9
10 DigitalIn swL(p18); // JP2 (2-3)
11 DigitalIn swU(p19); // JP3 (2-3)
12 DigitalIn swD(p20); // JP4 (2-3)
13 DigitalIn swR(p21); // JP5 (2-3)
14 DigitalIn swE(p22); // JP6 (2-3)
15
16 PwmOut beep(p23); // JP7 (2-3)
17
18 //-----
19 // Main
20 //-----
21 int main()
22 {
23     float freq[5] = {523, 587, 659, 698, 784};
24
25     swL.mode(PullUp); // Pull Up
26     swU.mode(PullUp); // Pull Up
27     swD.mode(PullUp); // Pull Up
28     swR.mode(PullUp); // Pull Up
29     swE.mode(PullUp); // Pull Up
30
31     while(1)
32     {
33         //-----
34         // Left SW
35         //-----
36         if( swL == 0 )
37         {
38             beep.period(1.0/freq[0]);
39             beep.write(0.5); //Duty
40             while(swL == 0 );
41         }
42         //-----
43         // Up SW
44         //-----
45         else if( swU == 0 )
46         {
47             beep.period(1.0/freq[1]);
48             beep.write(0.5); //Duty
49             while(swU == 0 );
50         }
51         //-----
52         // Down SW
53         //-----
54         else if( swD == 0 )
55         {
56             beep.period(1.0/freq[2]);
57             beep.write(0.5); //Duty
58             while(swD == 0 );
59         }
60         //-----
61         // Right SW
62         //-----
63         else if( swR == 0 )
64             beep.period(1.0/freq[3]);
65             beep.write(0.5); //Duty
66

```

```

67         while(swR == 0 );
68     }
69     //-----
70     // Enter SW
71     //-----
72     else if( swE == 0 )
73     {
74         beep.period(1.0/freq[4]);
75         beep.write(0.5);           //Duty
76         while(swE == 0 );
77     }
78     //-----
79     // SW All Off
80     //-----
81     else
82     {
83         beep.write(0.0);
84     }
85     //-----
86 }
87 }
88 }

```