

```

1 //=====
2 //
3 // Step 45
4 // voice out
5 //
6 //=====
7 #include "mbed.h"
8 #include "TextLCD.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 DigitalOut led1(LED1);
17 DigitalOut led2(LED2);
18 DigitalOut led3(LED3);
19 DigitalOut led4(LED4);
20
21 TextLCD lcd(p17, p12, p27, p28, p29, p30);    // rs, e, d4-d7
22 Serial pc(USBTX, USBRX);    // tx, rx
23 Serial voice(p13, p14);    // tx, rx
24 int rx_flg=0;
25 char buf[100];
26 int rx_cnt=0;
27
28 //=====
29 // Voice command Rx Interruput
30 //=====
31 void voice_rx (void)
32 {
33     char d;
34
35     d = voice.getc();
36     if( d == '>' )
37     {
38         led1=0;
39     }
40 }
41
42 //=====
43 // Rx Interruput
44 //=====
45 void pc_rx ()
46 {
47     char d;
48
49     led3=1;
50     d = pc.getc();
51     if( d == '¥n' )
52         return;
53
54     buf[rx_cnt++]=d;
55
56     if( d == '¥r' )
57     {
58         buf[rx_cnt]=0x00;
59         rx_flg=1;
60         rx_cnt=0;
61         led3=0;
62     }
63 }
64 //=====
65 // Main
66 //=====

```

```

67 int main()
68 {
69     swL.mode(PullUp);          // Pull Up
70     swU.mode(PullUp);          // Pull Up
71     swD.mode(PullUp);          // Pull Up
72     swR.mode(PullUp);          // Pull Up
73     swE.mode(PullUp);          // Pull Up
74
75     lcd.locate(0,0);
76     lcd.printf("Voice Maker");
77     lcd.locate(0,1);
78     lcd.printf("Ver. 1.20");
79
80     voice.attach(&voice_rx, Serial::RxIrq);
81     rx_flg=0;
82     led1 = 1;
83     wait(2);
84     led1 = 0;
85
86     while( 1 )
87     {
88         if( swL == 0 )
89         {
90             led1 = 1;
91             voice.printf("#J¥r");
92             while( swL == 0 );
93             wait(1);
94             led1 = 0;
95         }
96         if( swR == 0 )
97         {
98             led1 = 1;
99             voice.printf("#K¥r");
100            while( swR == 0 );
101            wait(1);
102            led1 = 0;
103        }
104        if( swU == 0 )
105        {
106            led1 = 1;
107            voice.printf("jei'windoga, /kaisetsu, suru, emube' ddo/ se'mina-de_su.¥r");
108            while( swU == 0 );
109            wait(5);
110            led1 = 0;
111        }
112        if( swD == 0 )
113        {
114            led1 = 1;
115            voice.printf("denwaba' ngo-wa <NUM VAL=0268-41-1088> de_su.¥r");
116            while( swD == 0 );
117            wait(6);
118            led1 = 0;
119        }
120        if( swE == 0 )
121        {
122            led1 = 1;
123            voice.printf("komandowo so-shin shite kudasai.¥r");
124            while( swE == 0 );
125            wait(3);
126            led1 = 0;
127            break;
128        }
129    }
130
131    led4=1;
132    pc.attach(&pc_rx, Serial::RxIrq);

```

```
133 while(1)
134 {
135     if( rx_flg == 1 )
136     {
137         led2=1;
138         rx_flg = 0;
139         voice.printf(buf);
140         buf[strlen(buf)-1] = 0;
141         lcd.locate(0,0);
142         lcd.printf(buf);
143         wait(3);
144         led2=0;
145     }
146 }
147 }
148
```