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1  #include<MKL25Z4.h> //INCLUDING LIBRARY
2  //=====red B18=====//
3  //=====init=====//
4  void led_red_init(){
5      SIM->SCGC5 |= (1<<10); //TO ACTIVATE PORT B OR ACTIVE PORT B CLOCK
6      //SET 8,9,10 = 001 TO GPIO
7      PORTB->PCR[18] |= (1<<8); //SETTING 8TH BIT TO 1
8      PORTB->PCR[18] &= 0xFFFFF9FF; //SETTING 9TH, 10TH BIT TO 0, OTHER UNCHANGED
9      PTB->PDDR |= (1<<18); //18TH BIT = 1, TO ACTIVATE 18 PIN
10 }
11 //=====ON=====//
12 void led_red_on(){ //!!! on on low
13     PTB->PCOR |= (1<<18 ); //CLEAR 18PIN VALUE
14 }
15 //=====OFF=====//
16 void led_red_off(){
17     PTB->PDOR |= (1<<18); //CLEAR 18PIN VALUE
18 }
19 //=====TOGGLE=====//
20 void led_red_toggle(){
21     PTB->PTOR |= (1<<18); //CLEAR 18PIN VALUE
22 }
23 //=====green B19=====//
24 //=====init=====//
25 void led_green_init(){
26     SIM->SCGC5 |= (1<<10); //TO ACTIVATE PORT B
27     PORTB->PCR[19] |= (1<<8); //SETTING 8TH BIT TO 1
28     PORTB->PCR[19] &= 0xFFFFF9FF; //SETTING 9TH, 10TH BIT TO 0, OTHER UNCHANGED
29     PTB->PDDR |= (1<<19); //18TH BIT = 1
30 }
31 //=====ON=====//
32 void led_green_on(){
33     PTB->PCOR |= (1<<19 ); //CLEAR 18PIN VALUE
34 }
35 //=====OFF=====//
36 void led_green_off(){
37     PTB->PDOR |= (1<<19); //CLEAR 18PIN VALUE
38 }
39 //=====TOGGLE=====//
40 void led_green_toggle(){
41     PTB->PTOR |= (1<<19); //CLEAR 18PIN VALUE
42 }
43 //=====blue D1=====//
44 //=====init=====//
45 void led_blue_init(){
46     SIM->SCGC5 |= (1<<12); //TO ACTIVATE PORT B
47     PORTD->PCR[1] |= (1<<8); //SETTING 8TH BIT TO 1
48     PORTD->PCR[1] &= 0xFFFFF9FF; //SETTING 9TH, 10TH BIT TO 0, OTHER UNCHANGED
49     PTD->PDDR |= (1<<1); //18TH BIT = 1
50 }
51 //=====ON=====//
52 void led_blue_on(){
53     PTD->PCOR |= (1<<1 ); //CLEAR 18PIN VALUE
54 }
55 //=====OFF=====//
56 void led_blue_off(){
57     PTD->PDOR |= (1<<1); //CLEAR 18PIN VALUE
58 }
59 //=====TOGGLE=====//
60 void led_blue_toggle(){
61     PTD->PTOR |= (1<<1); //CLEAR 18PIN VALUE
62 }
63
64 //=====DELAY=====//
65 void delay(long long int d){
66     while(d--);
67 }
68 //=====MAIN=====//
69 int main(void){
70     SystemCoreClockUpdate(); //updating clock from PLL
71
72     long long int n;          //NOUMBER OF BLINK

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73
74 //INIT ALL LED
75 led_red_init();
76 led_green_init();
77 led_blue_init();
78
79 // ===== BLINK RED FOR 100 TIMES =====//
80 led_red_on();
81 n = 1e2;
82 while(n--){
83     led_red_toggle();
84     delay(1e6);
85 }
86 led_red_off();
87
88 // ===== BLINK RED FOR 100 TIMES =====//
89 led_green_on();
90 n = 1e2;
91 while(n--){
92     led_green_toggle();
93     delay(1e6);
94 }
95 led_green_off();
96
97 // ===== BLINK RED FOR 100 TIMES =====//
98 led_blue_on();
99 n = 1e2;
100 while(n--){
101     led_blue_toggle();
102     delay(1e6);
103 }
104 led_blue_off();
105
106 // ===== BLINK ALL ONE AFTER OTHER FOR 100 TIMES =====//
107 n = 1e2;
108 while(n--){
109     led_red_on();
110     delay(1e6);
111     led_red_off();
112     delay(1e6);
113
114     led_green_on();
115     delay(1e6);
116     led_green_off();
117     delay(1e6);
118
119     led_blue_on();
120     delay(1e6);
121     led_blue_off();
122     delay(1e6);
123 }
124
125
126
127 }
```