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#include<lpc214x.h>
#define LED0 12

void delay(unsigned int time)
{
    unsigned int i,j;
    for(i = 0; i < time ;i++ )
    {
        for(j = 0; j < 5000 ; j++);
    }
}

int main(void)
{
    int i,j;

    PINSEL0 = 0x00000000; //set the pin function for pins as GPIO
    IODIR0 = 0x000FF000; // set the direction of pins as output

while(1)
{
    for(i = 0; i < 4 ; i++)
    {
        IOSET0 = 0x000FF000; // set the port pins to 1
        delay(150);
        IOCLR0 = 0x000FF000; //clear the port pins to 0
        delay(150);
    }
    //LED Rolling
    for(i = 0 ; i < 4 ; i++)
    {
        for(j = 0 ; j < 8; j++)
        {
            IOSET0 = 1 << (LED0 + j); // set the port pins to 1
            delay(50);
        }
        for(j = 7 ; j >= 0; j--)
        {
            IOCLR0 = 1 << (LED0 + j); //clear the port pins to 0
            delay(50);
        }
    }
    // LED SINGLE Rolling

    for(i = 0 ; i < 5 ; i++)
    {
        for(j = 0 ; j < 8; j++)
        {
            IOCLR0 = 1 << (LED0 + j); //clear the port pins to 0
            delay(50);
            IOSET0 = 0xFF << (LED0 + j); // set the port pins to 1
            delay(50);
        }
        for(j = 7 ; j >= 0; j--)
        {
            IOCLR0 = 1 << (LED0 + j); //clear the port pins to 0
            delay(50);
            IOSET0= 0xFF << (LED0 + j); // set the port pins to 1
            delay(50);
        }
    }

return 0;

}

```

