

```

#include <p32xxxx.h>
#pragma config FPLLMUL = MUL_20, FPLLIDIV = DIV_2, FPLLODIV = DIV_1, FWDTEN = OFF
#pragma config POSCMOD = HS, FNOSC = PRIPLL, FPBDIV = DIV_8
#define TRUE 1
typedef enum { STATE_1, STATE_2, /*...,*/ STATE_n } STATES;
/*#define STATE_1 0
#define STATE_2 1
.....
#define STATE_n N
*/
int main(void)
{
    STATES current_state=STATE_1;
    // int current_state=STATE_1;
    // do something
    while(TRUE)
    {
        switch current_state
        {
            case STATE_1:
                if (/*anywere condition*/)
                {
                    // do something
                    current_state=// some value of state type;
                }
                else if
                {
                    // do something
                    current_state=// another value of state type;
                }
                // else
                break;
            case // others states
                .
                .
                .
            case STATE_n:
                if (/*anywere condition*/)
                {
                    // do something
                    //current_state=
                }
                .
                .
                .
                break;
            default:
                // do something
                current_state=// another value of state type
                break;
        }
    }
    return 1;
}

```