

```
1  GPIO_PORTB_DIR      EQU 0x40005400
2  GPIO_PORTB_AFSEL    EQU 0x40005420
3  GPIO_PORTB_DEN      EQU 0x4000551C
4  SYSCTL_RCGCGPIO     EQU 0x400FE608
5
6  ;PORTS ARE CONNECTED AS
7  ;IN1 =>pb0 , IN2=>pb1 , IN3=>pb2 , IN4=>pb3
8  ;SW1 =>pb4 , SW2=>pb5 , SW3=>pb6 , SW4=>pb7
9
10         AREA          main, READONLY, CODE
11         THUMB
12         EXPORT        portb_init
13
14 portb_init PROC;
15         PUSH          {R0,R1}
16 Start    LDR           R1,=SYSCTL_RCGCGPIO
17         LDR           R0,[R1]
18         ORR           R0,R0,#0x2F
19         STR           R0,[R1]
20         NOP
21         NOP
22         LDR           R1,=GPIO_PORTB_DIR
23         LDR           R0,[R1]
24         MOV           R0,#0x0F
25         STR           R0,[R1]
26         LDR           R1,=GPIO_PORTB_AFSEL
27         LDR           R0,[R1]
28         BIC           R0,#0xFF
29         STR           R0,[R1]
30         LDR           R1,=GPIO_PORTB_DEN
31         LDR           R0,[R1]
32         ORR           R0,#0xFF
33         STR           R0,[R1]
34         POP           {R0,R1}
35         BX            LR
```