```
 1
 2  AVRASM ver. 2.2.7  E:\ESE_280\$MyDocuments$\Atmel Studio\7.0\lab_5
      \unconditional_input\unconditional_input\main.asm Tue Oct 06 19:16:17 2020
 3
 4  E:\ESE_280\$MyDocuments$\Atmel Studio\7.0\lab_5\unconditional_input
      \unconditional_input\main.asm(9): Including file 'C:/Program Files (x86)\Atmel
      \Studio\7.0\Packs\atmel\ATmega_DFP\1.3.300\avrasm\inc\m4809def.inc'
 5  E:\ESE_280\$MyDocuments$\Atmel Studio\7.0\lab_5\unconditional_input
      \unconditional_input\main.asm(9): Including file 'C:/Program Files (x86)\Atmel
      \Studio\7.0\Packs\atmel\ATmega_DFP\1.3.300\avrasm\inc\m4809def.inc'
 6
 7
 8                                  ; unconditional_input.asm
 9                                  ;
10                                  ; Created: 10/6/2020 6:38:10 PM
11                                  ; Author : hp
12                                  ;
13
14                                  .list
15
16
17                                  ; Replace with your application code
18                                  start:
19  000000 e000                        ldi r16, $00
20  000001 ef1f                        ldi r17, $FF
21  000002 b900                         out VPORTA_DIR, r16
22  000003 b91c                        out VPORTD_DIR, r17
23  000004 b90d                        out VPORTD_OUT, r16
24
25                                  main_loop:
26  000005 b102                        in r16, VPORTA_IN
27  000006 9500                        com r16
28  000007 b90d                        out VPORTD_OUT, r16
29
30
31  RESOURCE USE INFORMATION
32  ------------------------
33
34  Notice:
35  The register and instruction counts are symbol table hit counts,
36  and hence implicitly used resources are not counted, eg, the
37  'lpm' instruction without operands implicitly uses r0 and z,
38  none of which are counted.
39
40  x,y,z are separate entities in the symbol table and are
41  counted separately from r26..r31 here.
42
43  .dseg memory usage only counts static data declared with .byte
44
```

```
"ATmega4809" register use summary:
x  :   0 y  :   0 z  :   0 r0 :   0 r1 :   0 r2 :   0 r3 :   0 r4 :   0
r5 :   0 r6 :   0 r7 :   0 r8 :   0 r9 :   0 r10:   0 r11:   0 r12:   0
r13:   0 r14:   0 r15:   0 r16:   6 r17:   2 r18:   0 r19:   0 r20:   0
r21:   0 r22:   0 r23:   0 r24:   0 r25:   0 r26:   0 r27:   0 r28:   0
r29:   0 r30:   0 r31:   0
Registers used: 2 out of 35 (5.7%)

"ATmega4809" instruction use summary:
.lds  :   0 .sts  :   0 adc   :   0 add   :   0 adiw  :   0 and   :   0
andi  :   0 asr   :   0 bclr  :   0 bld   :   0 brbc  :   0 brbs  :   0
brcc  :   0 brcs  :   0 break :   0 breq  :   0 brge  :   0 brhc  :   0
brhs  :   0 brid  :   0 brie  :   0 brlo  :   0 brlt  :   0 brmi  :   0
brne  :   0 brpl  :   0 brsh  :   0 brtc  :   0 brts  :   0 brvc  :   0
brvs  :   0 bset  :   0 bst   :   0 call  :   0 cbi   :   0 cbr   :   0
clc   :   0 clh   :   0 cli   :   0 cln   :   0 clr   :   0 cls   :   0
clt   :   0 clv   :   0 clz   :   0 com   :   1 cp    :   0 cpc   :   0
cpi   :   0 cpse  :   0 dec   :   0 des   :   0 eor   :   0 fmul  :   0
fmuls :   0 fmulsu:   0 icall :   0 ijmp  :   0 in    :   1 inc   :   0
jmp   :   0 ld    :   0 ldd   :   0 ldi   :   2 lds   :   0 lpm   :   0
lsl   :   0 lsr   :   0 mov   :   0 movw  :   0 mul   :   0 muls  :   0
mulsu :   0 neg   :   0 nop   :   0 or    :   0 ori   :   0 out   :   4
pop   :   0 push  :   0 rcall :   0 ret   :   0 reti  :   0 rjmp  :   1
rol   :   0 ror   :   0 sbc   :   0 sbci  :   0 sbi   :   0 sbic  :   0
sbis  :   0 sbiw  :   0 sbr   :   0 sbrc  :   0 sbrs  :   0 sec   :   0
seh   :   0 sei   :   0 sen   :   0 ser   :   0 ses   :   0 set   :   0
sev   :   0 sez   :   0 sleep :   0 spm   :   0 st    :   0 std   :   0
sts   :   0 sub   :   0 subi  :   0 swap  :   0 tst   :   0 wdr   :   0

Instructions used: 5 out of 114 (4.4%)

"ATmega4809" memory use summary [bytes]:
Segment   Begin    End      Code   Data   Used    Size   Use%
----------------------------------------------------------------
[.cseg] 0x000000 0x000012     18      0     18   49152   0.0%
[.dseg] 0x002800 0x002800      0      0      0    6144   0.0%
[.eseg] 0x000000 0x000000      0      0      0     256   0.0%

Assembly complete, 0 errors, 0 warnings
```