

```

Include 'M64DEF.INC'
.ORG 0x0000
JMP main
.ORG 0x0004
JMP INT1_check
.ORG 0x000E
JMP INT6_copy
.ORG 0x0050
main : LDI R16, low(RAMEND)
      OUT SPL, R16
      LDI R16, high(RAMEND)
      OUT SPH, R16
      LDI R16, 0x00
      STS EICRA, R16
      OUT DDRB, R16
      OUT DDRD, R16
      LDI R16, 0x10
      STS EICRB, R16
      LDI R16, 0x42
      OUT EIMSK, R16
      LDI R16, 0x00
      LDI R16, 0x0FF
      OUT DDRC, R16
      CLR R29 ; count INT1
      CLR R30 ; count INT6
      CLR R31 ; nuber of Eq. PORTB = PORTD
      CLR R17
      CLR R22
      CLR R23
      SEI
loop : IN R20, PINB
      CLR R19
      CLR R21
      ADD R20, R20
      ADC R21, R19
      STS 0x1200, R20
      STS 0x1201, R21
      JMP loop

INT6_copy : PUSH R17
          PUSH R22
          IN R17, SREG
          PUSH R17
          IN R22, PINB
          OUT PORTC, R22
          INC R29
          STS 0x1202, R29
          POP R17
          OUT SREG, R17
          POP R22
          POP R17
          RETI

INT1_check : PUSH R17
          PUSH R22
          PUSH R23
          IN R17, SREG
          PUSH R17
          IN R22, PINB
          IN R23, PIND
          CP R22, R23
          BRNE next
          INC R31
next : INC R30
      STS 0x1203, R31
      STS 0x1204, R30
      POP R17
      OUT SREG, R17
      POP R23
      POP R22
      POP R17
      RETI

```