

```
; Q 1> Addition of two BCD numbers of 16 bit width
```

```
SU      4300h
        [4300h]    =    99h        ; A = 999 in BCD
        [4301h]    =    09h        ;
        [4302h]    =    01h        ; B = 1 in BCD
        [4303h]    =    00h        ;
        .
```

```
A
```

```
ORG 4200h
    lxi    h, 4300h
    mov    b, M
    inx    h
    mov    c, M
    inx    h
    mov    a, b
    add    M
    mov    b, a
    mov    a, c
    aci    0
    inx    h
    add    M
    mov    c, a
    mov    a, b
    daa
    mov    b, a
    mov    a, c
    aci    0
    daa
    mov    c, a
    inx    h
    mov    M, b
    inx    h
    mov    M, c
    hlt
    .
```

```
G      4200h
INT                                ; (try '.' here)
```

```
SU      4304h
        [4304h]    -> 00h        ; ans = 1000h (1000 in BCD)
        [4305h]    -> 10h        ;
        .
```