



ATHARVA YADAV

ROLL NO : 127

BATCH : S23

MPL ASSIGNMENT NO.5

AIM: TO PERFORM 16 BIT BCD ADDITION

```
DATA_SEG SEGMENT  NUM1 DW 5689H  NUM2 DW  
1234H  SUM DW 0 DATA_SEG ENDS
```

```
CODE_SEG SEGMENT
```

```
    ASSUME CS: CODE_SEG, DS: DATA_SEG      START:
```

```
    MOV AX, DATA_SEG
```

```
    ;initialize data segment reg
```

```
    MOV DS, AX
```

```
    ;Move NUM1 and NUM2 to AX and Bx respectively
```

```
    MOV AX, NUM1  MOV BX, NUM2
```

```
    ;Add AL and BL save it to AL and do DAA
```

```
    ADD AL, BL
```

```
    DAA
```

```
    MOV CL, AL
```

```
    ;Move AL to CL
```

```
    MOV AL, AH
```

```
    ADC AL, BH
```

```
    DAA
```

```
    MOV CH, AL
```

```
    MOV SUM, CX
```

```
    MOV AH, 4CH
```

```
    ;exit to DOS      INT 21H
```

```
CODE_SEG ENDS
```

```
END START
```

GUI Turbo Assembler x64

FileEditViewRunBreakpointsDataOptions

Debug the executable

READY

Module: 89p1 File: 89p1.asm 43

1

;

Move AL to CL

•

MOV AL , AH

•

ADC AL

•

DAA

•

MOV CH

•

MOV SU

•

MOV AH

•

;exit

▶

INT 21

CODE_SEG ENDS

END START

Variables

3

num122153 (5689h)

num24660 (1234h)

sum26915 (6923h)

start0007D:0000

Watches

2

[]=Regs=4=[]

ax 4C69

bx 1234

cx 6923

dx 0000

si 0000

di 0000

bp 0000

sp 0000

ds 007C

es 006C

ss 007B

cs 007D

ip 001E

c=0

z=0

s=0

o=0

p=1

a=0

i=1

d=0

F1-Help F2-Bkpt F3-Mod F4-Here F5-Zoom F6-Next F7-Trace F8-Step F9-Run F10-Menu