

PRACTICAL: 2(B5)

AIM: Add the 16-bit number in memory locations 4000H and 4001H to the 16-bit number in memory locations 4002H and 4003H. The most significant eight bits of the two numbers to be added are in memory locations 4001H and 4003H. Store the result in memory locations 4004H and 4005H with the most significant byte in memory location 4005H.

CODE:

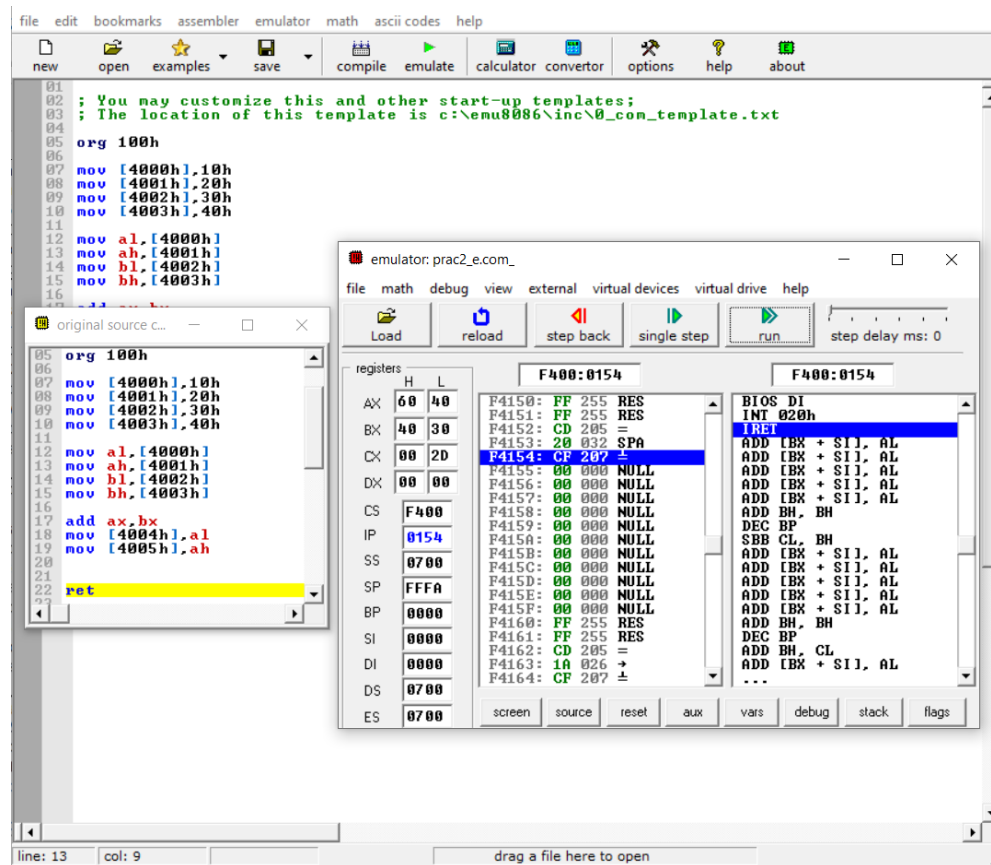
```
org 100h

mov [4000h],10h
mov [4001h],20h
mov [4002h],30h
mov [4003h],40h

mov al,[4000h]
mov ah,[4001h]
mov bl,[4002h]
mov bh,[4003h]

add ax,bx
mov [4004h],al
mov [4005h],ah

ret
```

OUTPUT:

Random Access Memory

4004 update table list

0700:4004	40	60	00	00	00	00	00	00	00	00	00	00	00	00	00	@'
0700:4014	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	.
0700:4024	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	.
0700:4034	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	.
0700:4044	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	.
0700:4054	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	.
0700:4064	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	.
0700:4074	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	.

CONCLUSION:

We learned about ADC command and its implementation for 16-Bit Numbers.