

PRACTICAL: 3(B7)

AIM: Implement a program to mask the lower four bits of content of the memory Location.

CODE:

```
org 100h
```

```
MOV [4000H], 00101010b
```

```
MOV AL, [4000H]
```

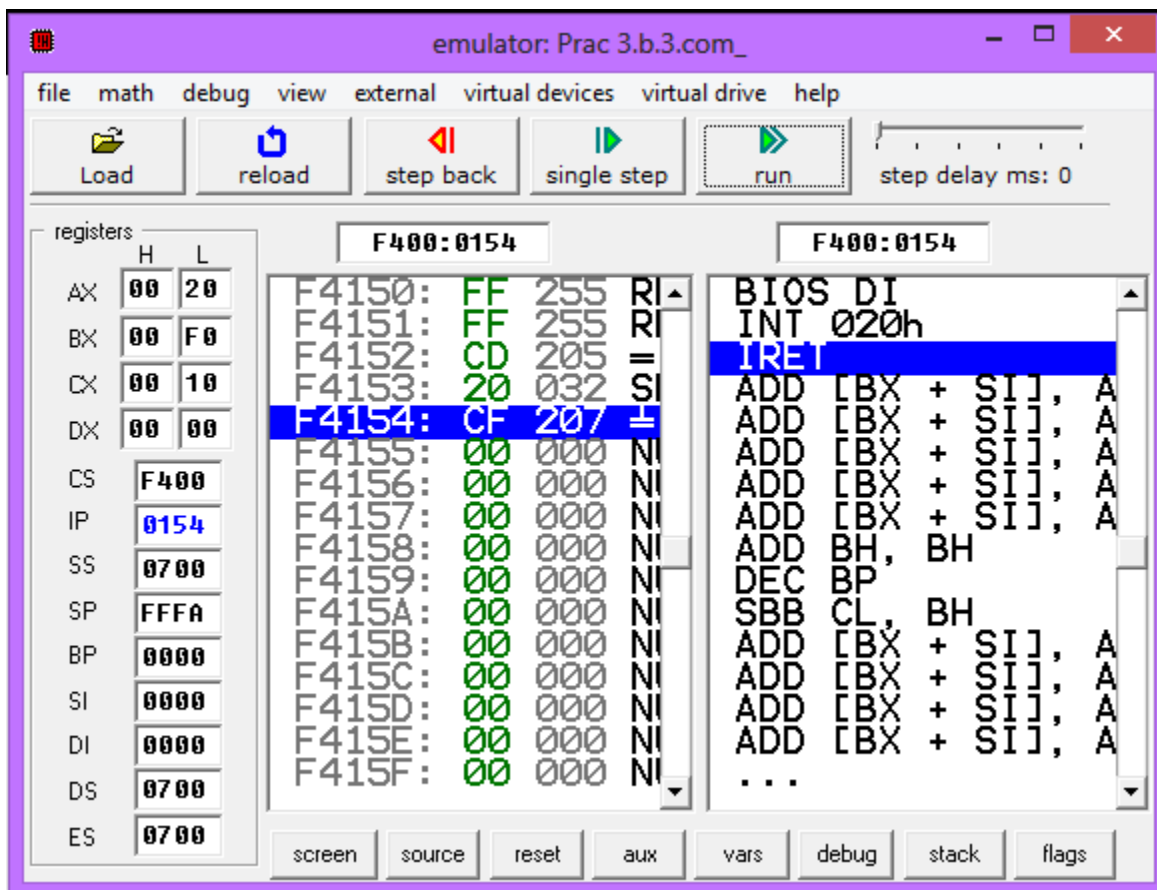
```
MOV BL, 11110000b
```

```
AND AL,BL
```

```
MOV [4000H], AL
```

```
ret
```

OUTPUT:



Before:

Random Access Memory

0700:4000

update

table

0700:4000	2A	00	00	00	00
0700:4010	00	00	00	00	00
0700:4020	00	00	00	00	00
0700:4030	00	00	00	00	00
0700:4040	00	00	00	00	00
0700:4050	00	00	00	00	00
0700:4060	00	00	00	00	00

After:

A screenshot of a software window titled "Random Access Memory". The window has a purple title bar with standard OS controls (minimize, maximize, close). Below the title bar, there is a header area with three elements: a text box containing "0700:4000", a button labeled "update" with a dashed border, and a radio button followed by the text "table". The main area of the window displays a table of memory addresses and their corresponding values. The addresses range from 0700:4000 to 0700:4060 in increments of 10. The value at 0700:4000 is "20 00 00 00 00", while all other addresses have the value "00 00 00 00 00".

CONCLUSION:

We learned that How to mask lower 4 bits of content of memory location by using AND command.