### DECIMAL TO HEXADECIMAL

### AIM

To develop an assembly language program to convert a number in decimal to it's equivalent Hexadecimal.

# **ALGORITHM**

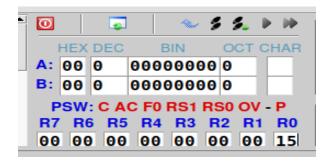
```
Algorithm 1 Decimal to hex conversion
1: Start
2: Read the input in decimal (d ec).
3: m = d ec/16
4: hex = d ec - 6 * m
5: Print the result in hexadecimal (hex).
6: Stop
```

### SOURCE CODE

MOV A , RO

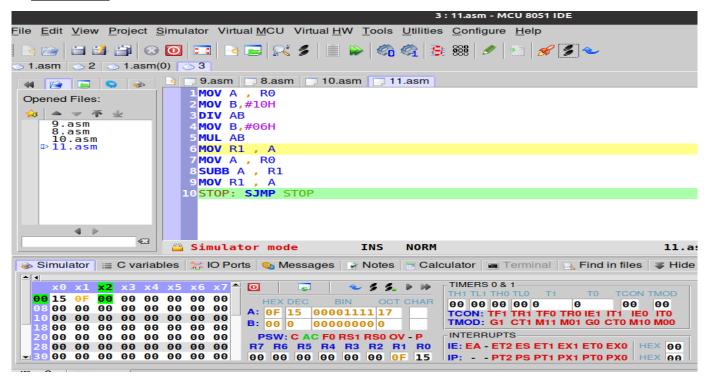
```
MOV B,#10H
DIV AB
MOV B,#06H
MUL AB
MOV R1 , A
MOV A , R0
SUBB A , R1
MOV R1 , A
STOP: SJMP STOP
```

### **INPUT:**



<u>Input in R0</u>

# **OUTPUT:**



Output in R1

### RESULT:

Assembly language program for converting a number in decimal to it's equivalent hexadecimal has been developed and verified using MCU-8051-IDE.

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