MULTIPLICATION AND DIVISION OF TWO 8-BIT NUMBERS

AIM

To develop an assembly language program to multiply and divide two 8-bit numbers.

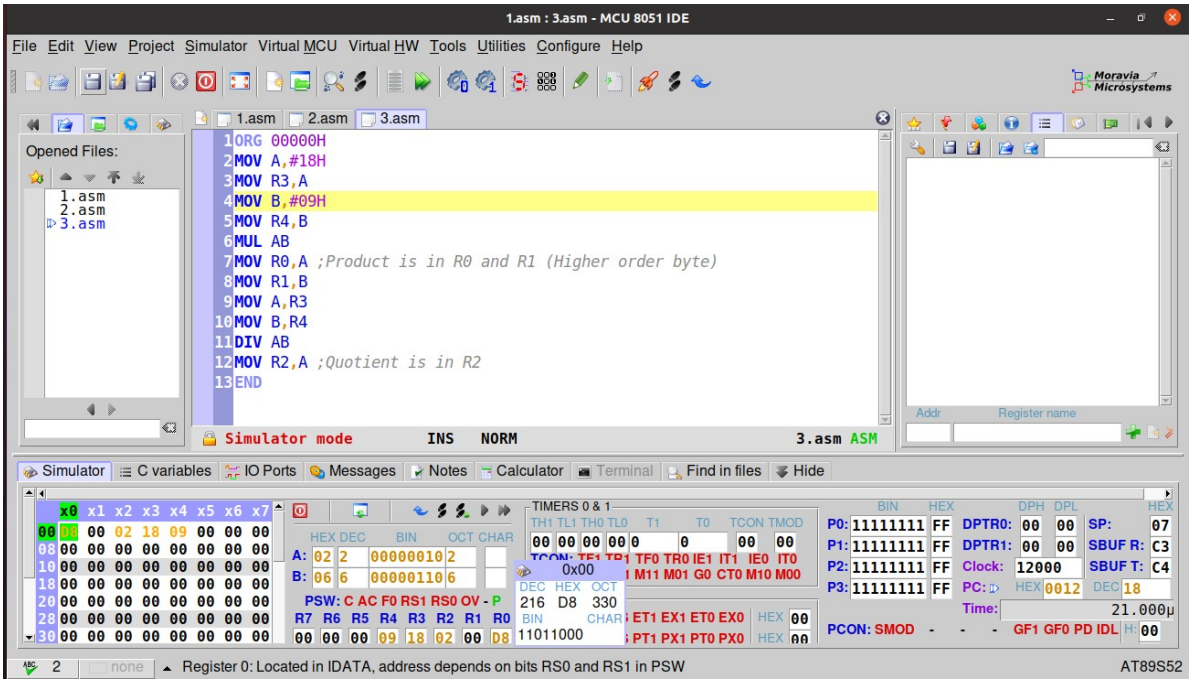
ALGORITHM

Algorithm 1 Multiplication and Division of two 8-bit numbers
1: Start
2: Read the two numbers (n1,n2).
3: product = n1 * n2
4: quotient = n1/n2
5: remaind er = n1%n2
6: Print the results (product,quotient,remainder).
7: Stop

SOURCE CODE

```
ORG 00000H
MOV A,#18H
MOV R3,A
MOV B,#09H
MOV R4,B
MUL AB
MOV R0,A ;Product is in R0 and R1 (Higher order byte)
MOV R1,B
MOV A,R3
MOV B,R4
DIV AB
MOV R2,A ;Quotient is in R2
END
```

OUTPUT:



RESULT:

Executed program to Multiplication and Division of two 16-bit numbers in emu8086 and obtained the required outputs.

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