Program to add 8 bit numbers

DATA SEGMENT

A1 DB 0FFH

A2 DB 01H

A3 DB 00H

A4 DB 00H

DATA ENDS

CODE SEGMENT

ASSUME CS:CODE,DS:DATA

START: MOV AX,DATA

 MOV DS,AX

 MOV AH,A1

 MOV AL,A2

 ADD AH,AL

 JNC NEXT

 INC DL

 NEXT: MOV A3,AH

 INT 3

CODE ENDS

 END START

Program to subtract 2 8 bit numbers

DATA SEGMENT

A1 DB 56H

A2 DB 12H

A3 DB 00H

DATA ENDS

CODE SEGMENT

ASSUME CS:CODE,DS:DATA

START: MOV AX,DATA

 MOV DS,AX

 MOV DL,00H

 MOV AH,A1

 MOV AL,A2

 SUB AH,AL

 MOV A3,AH

 INT 3

CODE ENDS

 END START

Program to multiply two 8 bit numbers

DATA SEGMENT

A1 DB 56H

A2 DB 12H

A3 DW 0000H

DATA ENDS

CODE SEGMENT

ASSUME CS:CODE,DS:DATA

START: MOV AX,DATA

 MOV DS,AX

 MOV AL,A1

 MOV BL,A2

 MUL BL

 MOV A3,AX

 INT 3

CODE ENDS

 END START

4. Program to divide a 16 bit number by an eight bit number

DATA SEGMENT

A1 DW 1234H

A2 DB 0F2H

A3 DB 00H

A4 DB 00H

DATA ENDS

CODE SEGMENT

ASSUME CS:CODE,DS:DATA

START: MOV AX,DATA

 MOV DS,AX

 MOV AX,A1

 MOV BL,A2

 DIV BL

 MOV A3,AL

 MOV A4,AH

 INT 3

CODE ENDS

 END START