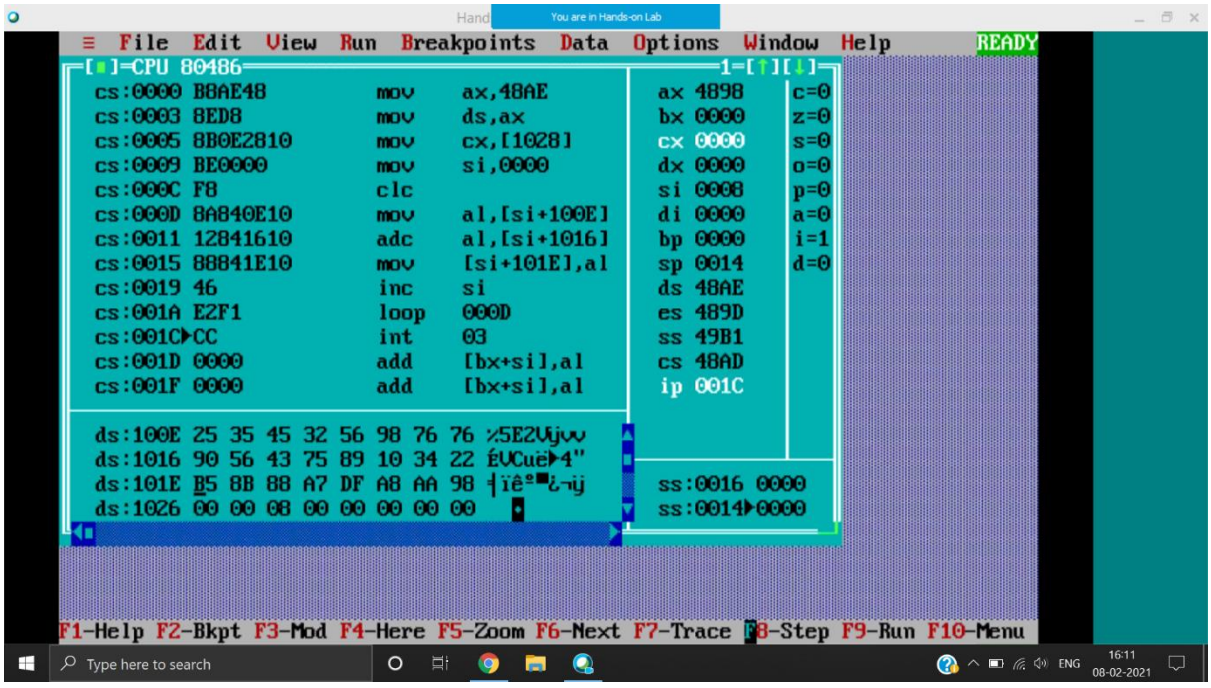
DHRUV MAHESHWARI 2019A7PS0020U

Lab 2

P1:

```
P1: .MODEL SMALL
    .STACK 20
    .DATA
    ORG 1000H
    NUM1 DB 25H, 35H, 45H, 32H, 56H, 98H, 76H, 76H
    NUM2 DB 90H, 56H, 43H, 75H, 89H, 10H, 34H, 22H
    ANS DB 10 DUP(?)
    COUNT DW 8H
    .CODE
    START:
    MOV AX, @DATA
    MOV DS, AX
    MOV CX, COUNT
    MOV SI, 0H
    CLC
    REPEAT:
    MOV AL, NUM1[SI]
    ADC AL, NUM2[SI]
    MOV ANS[SI], AL
    INC SI
    LOOP REPEAT
    INT 3
    END START
```



DS:100EH

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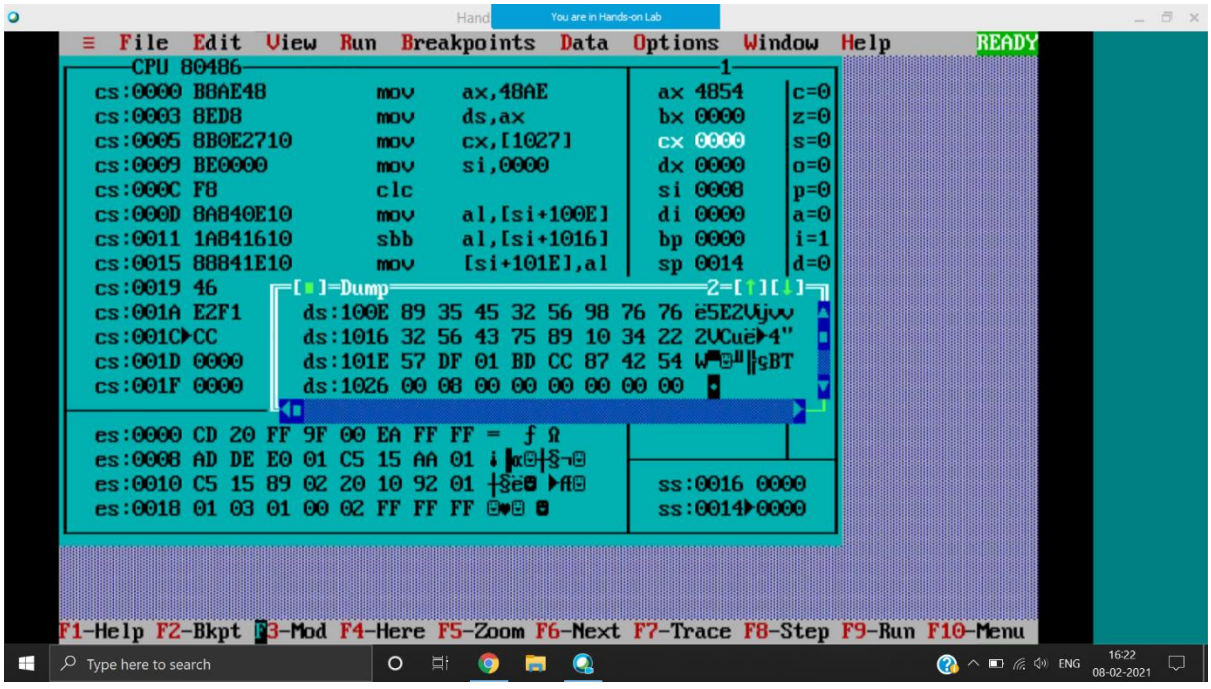
P2:

```
P2. MODEL SMALL
    STACK 20
    DATA
    ORG 1000H
    NUM1 DB 89H, 35H, 45H, 32H, 56H, 98H, 76H, 76H
    NUM2 DB 32H, 56H, 43H, 75H, 89H, 10H, 34H, 22H
    ANS DB 9 DUP(0)
    COUNT DW 8H

    .CODE
    START:
    MOV AX, @DATA
    MOV DS, AX
    MOV CX, COUNT
    MOV SI, 0H
    CLC
    REPEAT:
    MOV AL, NUM1[SI]
    SBB AL, NUM2[SI]
    MOV ANS[SI], AL
    INC SI
    LOOP REPEAT
    INT 3
    END START
```



DS:100EH

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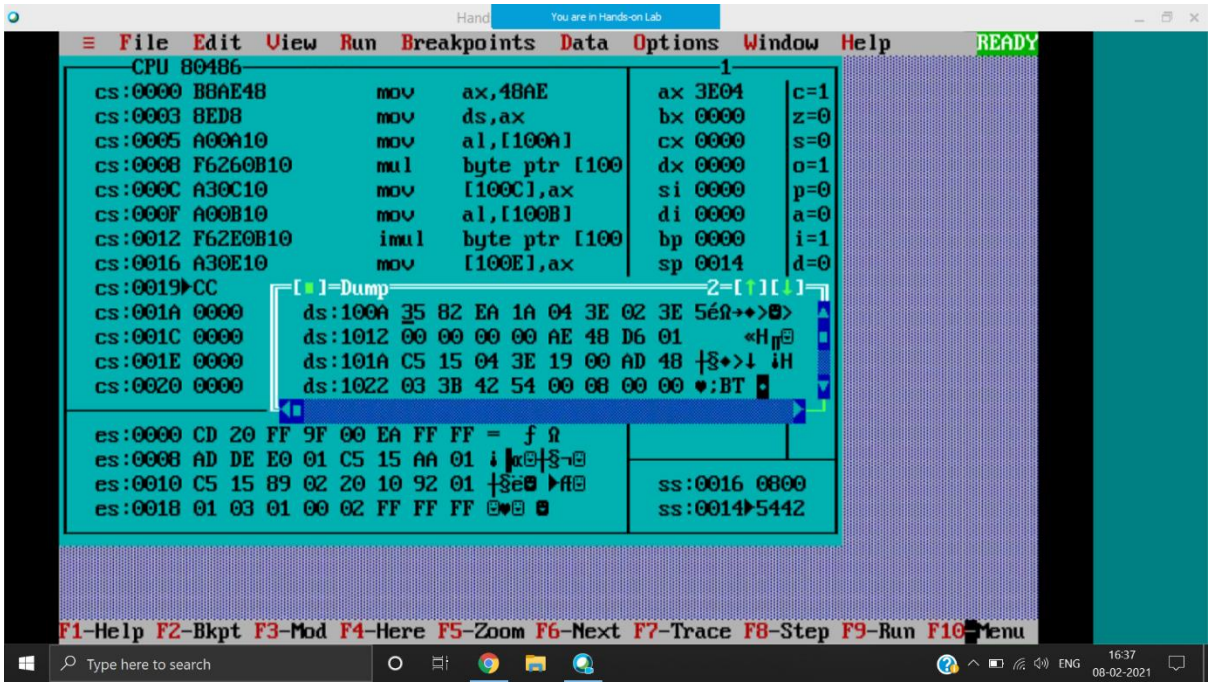
P3:

```
P3: .model small
    .stack 20
    .data
    org 1000H
    N1 DB 35H
    N2 DB 82H
    Un_Sign_PROD DW ?
    Sign_PROD DW ?
    .CODE
    START:
    MOV AX, @DATA
    MOV DS, AX
    MOV AL, N1
    MUL N2
    MOV Un_Sign_Prod, AX
    MOV AL, N1
    IMUL N2
    MOV Sign_PROD, AX
    INT 3
    END START
```



DS:100AH

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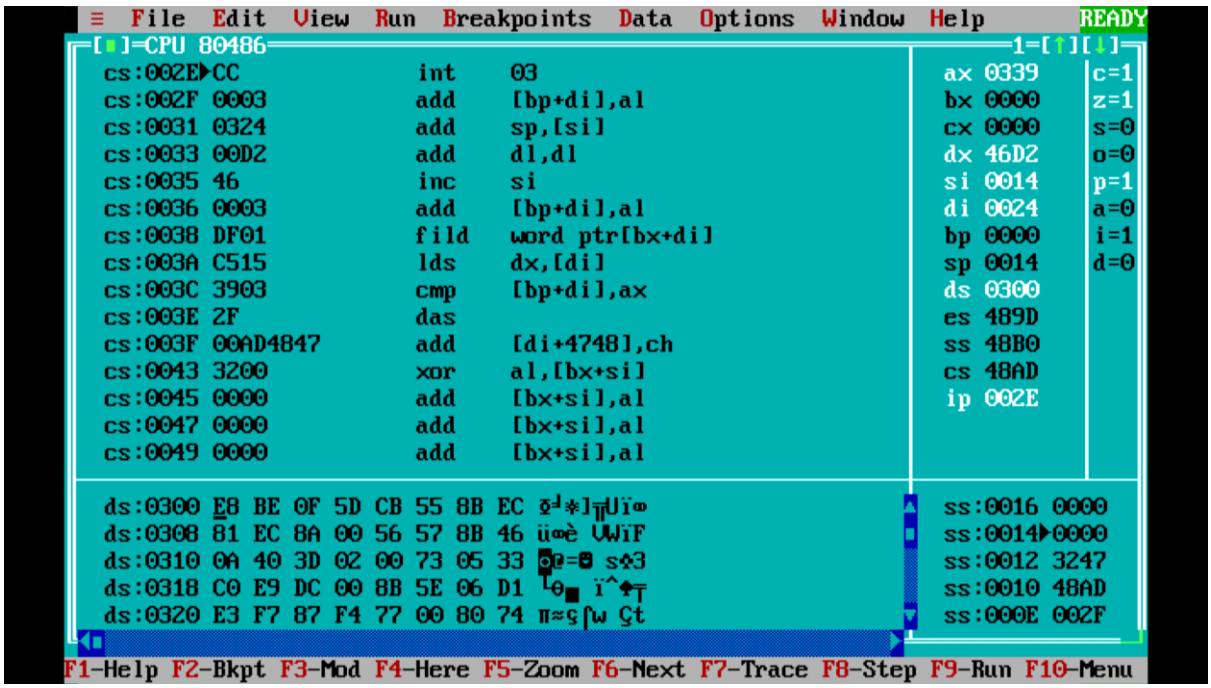
Ex 1

```
Ex1  .model small
     .stack 20
     .data
     .code
     START:
     MOV AX, 0300H
     MOV DS, AX
     MOV SI, 0000H
     MOV DI, 0010H
     MOV CL, 04H
     REPEAT:
     MOV AL, [SI]
     MUL [DI]
     INC SI
     INC DI
     DEC CL
     JNZ REPEAT

     MOV AX, 0300H
     MOV DS, AX
     MOV SI, 0010H
     MOV DI, 0020H
     MOV CL, 04H
     X1
     MOV AL, [SI]
     MOV [DI], AL
     INC SI
     INC DI
     DEC CL
     JNZ X1      INT 3   END START
```



DS:0300H

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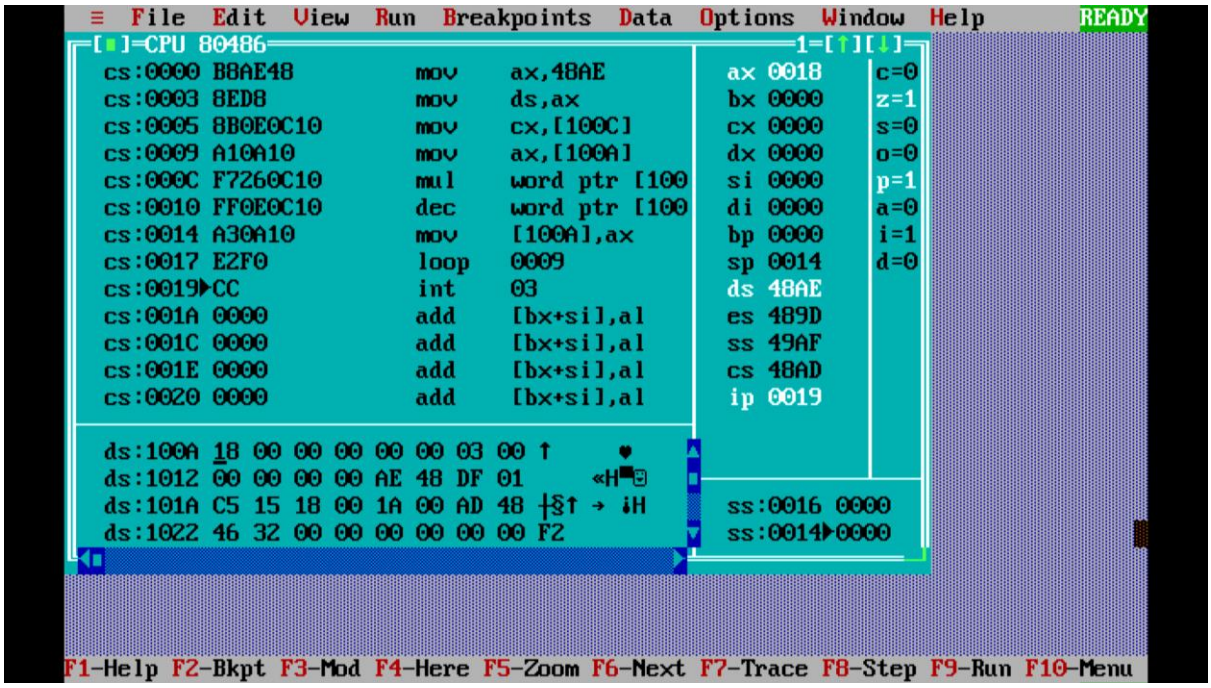
Ex2

```
Ex 2 . MODEL SMALL
     . STACK 20
     . DATA
     . ORG 1000H
     RES DW 1H
     COUNT DW 4H

     .CODE
     START:
     MOV AX, @DATA
     MOV DS, AX
     MOV CX, COUNT
     REPEAT:
     MOV AX, RES
     MUL COUNT
     DEC COUNT
     MOV RES, AX
     LOOP REPEAT
     INT 3
     END START
```



DS:100AH

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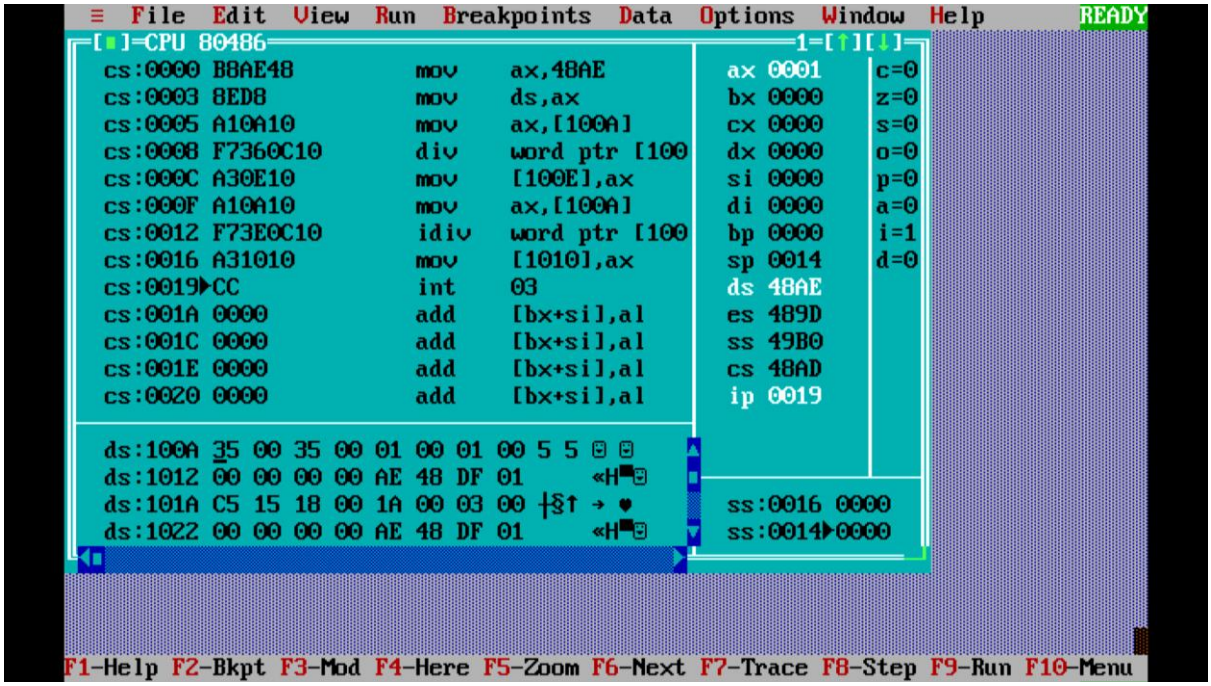
Ex 3:

```
Ex 3. model small
      . stack 20
      . data
      org 1000H
      N1 DB 35H
      N2 DB 35H
      UNSIGN_DIV DW ?
      SIGN_DIV DW ?

      .CODE
      START:
      MOV AX, @DATA
       MOV DS, AX
       MOV AL, N1
       DIV N2
       MOV UNSIGN_DIV, AX
        MOV AL, N2
       IDIV N2
        MOV SIGN_DIV, AX
       INT 3
        END START
```



DS:100AH