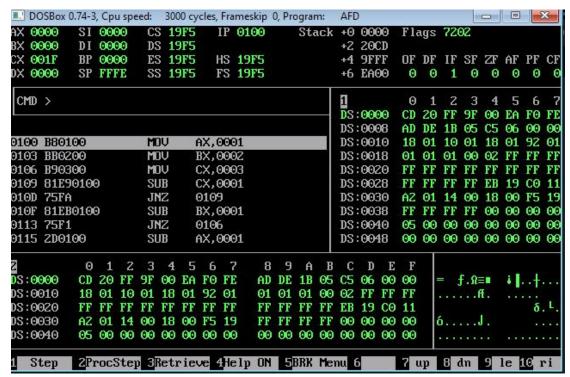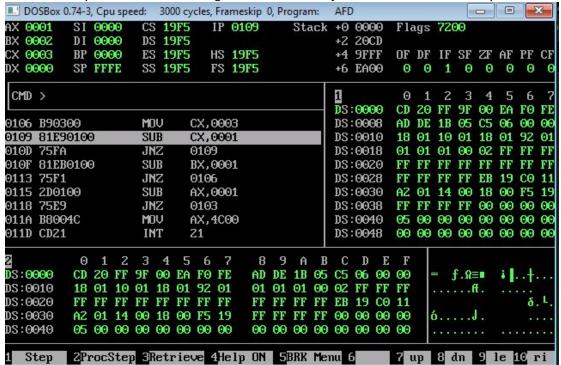# Step Number:01

We just moved 1 in Ax and 2 in Bx and 3 in Cx Register

Step Number :02

So we basically subtract 1 from CX register and check the jnz condition we move every iteration.

Step Number :03

As we can see we back on CX and with that we move every iteration and when the upper loop goes zero it goes inner and in inner if it jumps then we again going to reinitialize the values and do for every iteration.

Step Number :04

 Here condition meet the required number like for jnz it's zero so it did not jump and goes on termination of program.

```
AX 0000    SI 0000    CS 19F5    IP 0100      Stack +0 0000   Flags 7202
BX 0000    DI 0000    DS 19F5                       +2 20CD
CX 0000    BP 0000    ES 19F5    HS 19F5            +4 9FFF   OF DF IF SF ZF AF PF CF
DX 0000    SP FFFE    SS 19F5    FS 19F5            +6 EA00    0  0  1  0  0  0  0  0

 CMD >█                                          1         0  1  2  3  4  5  6  7
                                                 DS:0000  CD 20 FF 9F 00 EA FF FF
      > Program terminated OK                    DS:0008  AD DE 1B 05 C5 06 00 00
 0100 B80100          MOV     AX,0001            DS:0010  18 01 10 01 18 01 92 01
 0103 BB0200          MOV     BX,0002            DS:0018  01 01 01 00 02 FF FF FF
 0106 B90300          MOV     CX,0003            DS:0020  FF FF FF FF FF FF FF FF
 0109 81E90100        SUB     CX,0001            DS:0028  FF FF FF FF EB 19 E4 11
 010D 75FA            JNZ     0109               DS:0030  A2 01 14 00 18 00 F5 19
 010F 81EB0100        SUB     BX,0001            DS:0038  FF FF FF FF 00 00 00 00
 0113 75F1            JNZ     0106               DS:0040  05 00 00 00 00 00 00 00
 0115 2D0100          SUB     AX,0001            DS:0048  00 00 00 00 00 00 00 00

2          0  1  2  3  4  5  6  7    8  9  A  B  C  D  E  F
DS:0000   CD 20 FF 9F 00 EA FF FF   AD DE 1B 05 C5 06 00 00   =  ƒ.Ω      ¡▌..┼...
DS:0010   18 01 10 01 18 01 92 01   01 01 01 00 02 FF FF FF   ......ff.     .....
DS:0020   FF FF FF FF FF FF FF FF   FF FF FF FF EB 19 E4 11                 δ.Σ.
DS:0030   A2 01 14 00 18 00 F5 19   FF FF FF FF 00 00 00 00   ó.....J.       ....
DS:0040   05 00 00 00 00 00 00 00   00 00 00 00 00 00 00 00   ........    ........

1  Step     2ProcStep 3Retrieve 4Help ON  5BRK Menu 6        7 up  8 dn  9 le 10 ri
```