

TEMA 1 PMD

1) Rularea exemplelor de program pentru INC si DEC; mentionarea modificarii variabilelor din VARS, cat si a registrelor AL, AX etc + explicatii

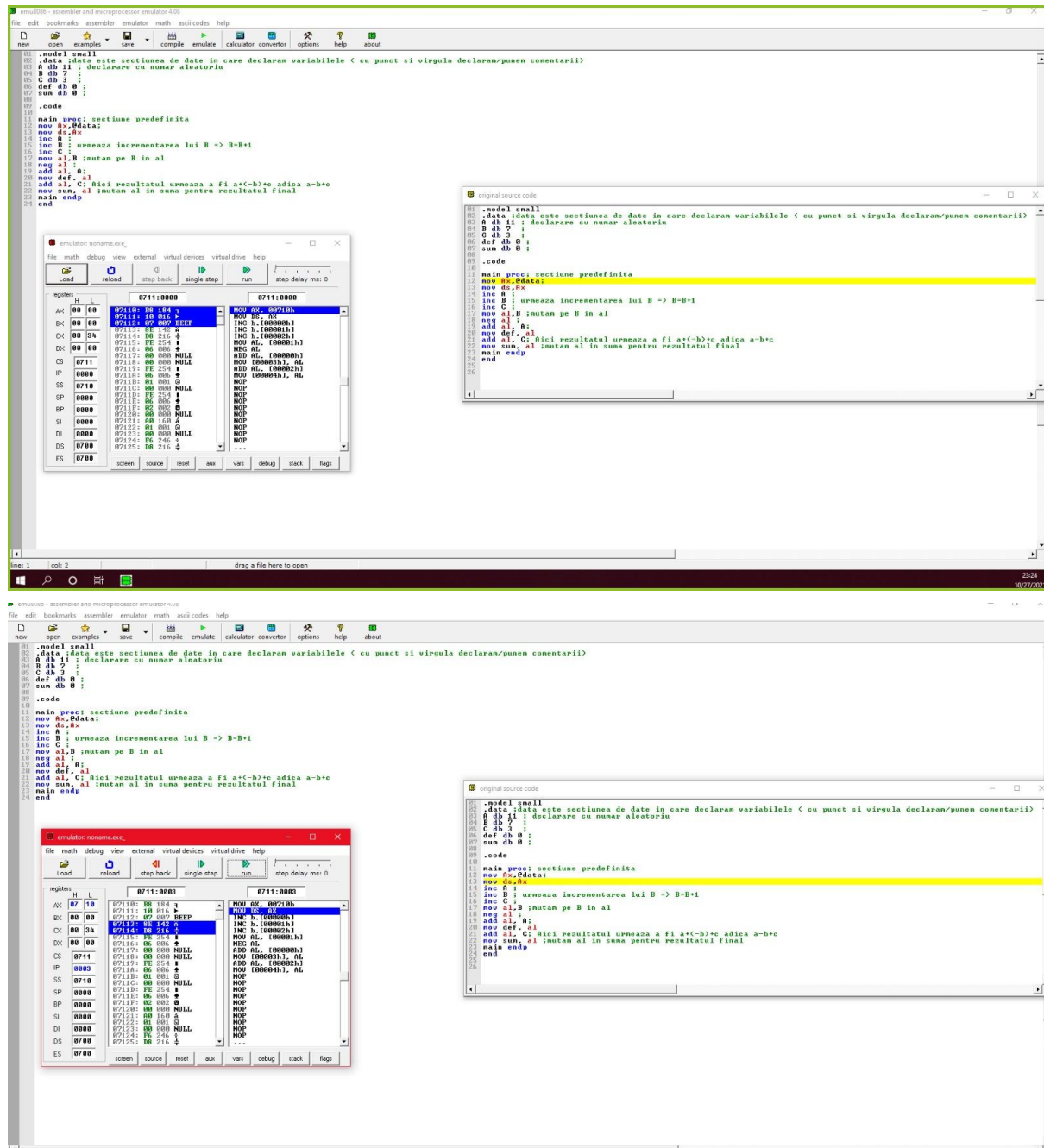
2) Calcul expresie: $A(++) - (B++) + (C++)$: cod, explicatii, modificare variabile din VARS, cat si a registrelor folosite.

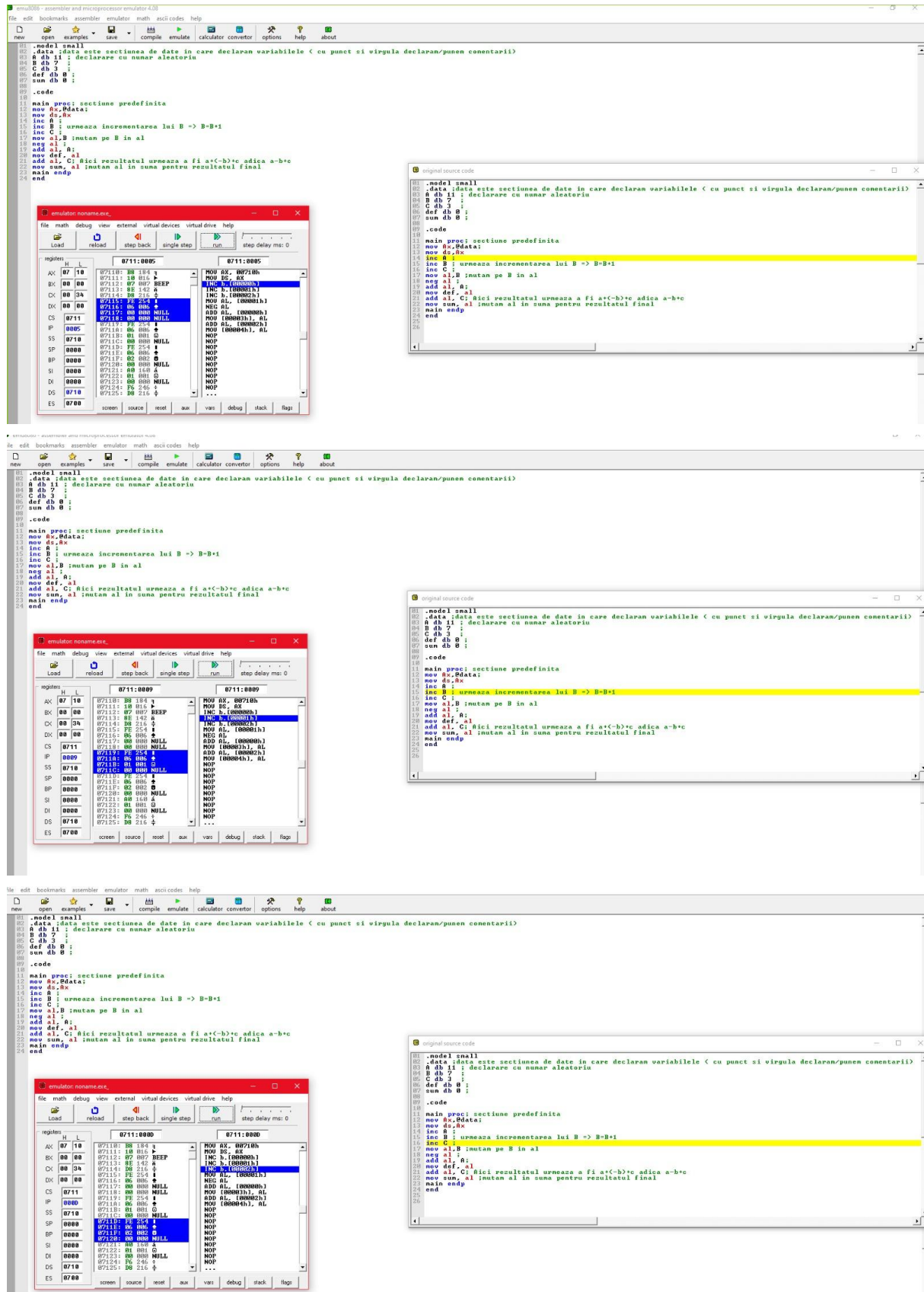
CODUL:

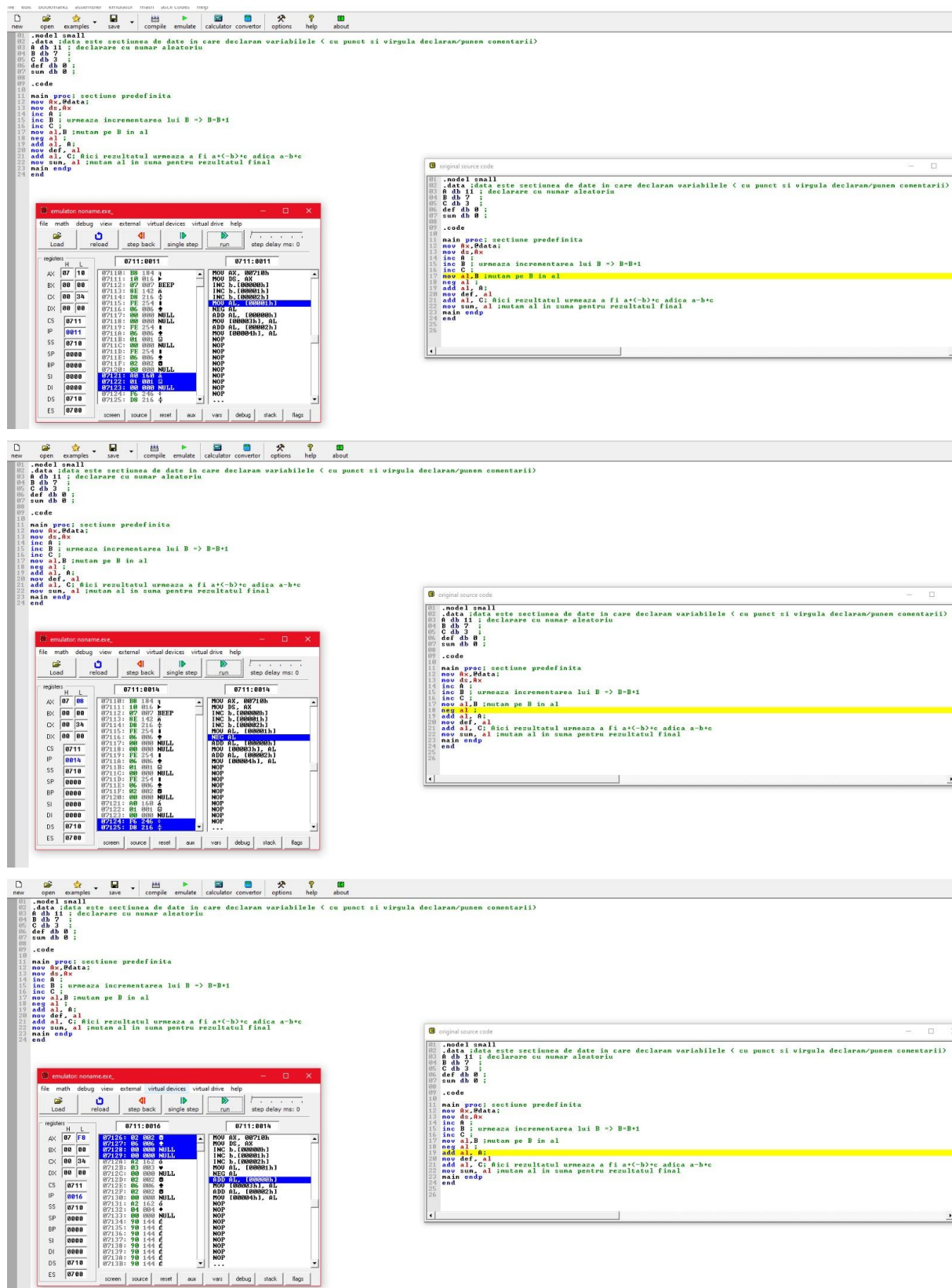
```
.model small
.data ;data este sectiunea de date in care declaram variabilele ( cu punct si virgula declaram/punem
comentarii)
A db 11 ; declarare cu numar aleatoriu
B db 7
C db 3
def db 0 ;
sum db 0

.code

main proc; sectiune predefinita
mov Ax,@data;
mov ds,Ax
inc A ;
inc B ; urmeaza incrementarea lui B => B=B+1
inc C ;
mov al,B ;mutam pe B in al
neg al ;
add al, A;
mov def, al
add al, C; Aici rezultatul urmeaza a fi a+(-b)+c adica a-b+c
mov sum, al ;mutam al in suma pentru rezultatul final
main endp
end
```







The image displays the Noname emulator interface, which is used for running and debugging assembly programs. The main window is divided into several sections:

- Assembly Code:** The top section shows the assembly code being executed. It includes a data section with variables `db 11`, `db 7`, `db 3`, and `db 0`, and a code section with instructions like `mov dx, data`, `inc B`, `inc C`, `mov al, B`, `neg al`, `add al, A`, `add al, C`, `mov sum, al`, and `main endp`.
- Registers:** The middle section shows the state of the registers. The `AX` register is highlighted, showing its value as `0711:001A` and `0711:001A`. Other registers like `BC`, `DX`, `CS`, `IP`, `SS`, `SP`, `BP`, `SI`, `DI`, and `DS` are also visible.
- Original Source Code:** The bottom section shows the original source code, which is a C program. It includes a data section with variables `data`, `db 11`, `db 7`, `db 3`, and `db 0`, and a code section with instructions like `main proc: sectiune predefinita`, `mov dx, data`, `inc B`, `inc C`, `mov al, B`, `neg al`, `add al, A`, `add al, C`, `mov sum, al`, and `main endp`.

The emulator is running the program, and the registers are updated accordingly. The original source code is also displayed for reference.