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SUBJECT: COAL

LAB11-TASK: 1, 2, 3:

The screenshot shows a debugger interface with three main windows:

- Original source code window:** Displays the assembly code for a program named "noname.exe". The code implements a division operation where the quotient is stored in AH and the remainder in DL. It uses INT 21h to perform the division and INT 20h to exit the interrupt.
- Emulator window:** Shows the output of the program. The screen displays the value 51, which is the remainder of the division (5 divided by 2).
- Registers and memory dump window:** Shows the state of CPU registers and memory at address F400h. Registers include AX (4C 31), BX (00 05), CX (01 38), DX (00 31), CS (F400), IP (0204), SS (0710), SP (00FA), BP (0000), SI (0000), DI (0000), DS (0700), and ES (0700). The memory dump shows a series of INT 21h instructions starting at F4200h.

```
01 l stack 100h
02 .data
03 rem db ?
04 quo db ?
05 .code
06
07 main proc
08 mov ax,26
09 mov bl,5
10 div bl
11 mov quo,al
12 mov rem,ah
13 mov dl,quo
14 add dl,48
15 mov ah,2
16 int 21h
17 mov dl,rem
18 add dl,48
19 mov ah,2
20 int 21h
21 mov ah,2
22 int 21h
23 main endp
24 end main
```

F400:0200 - F400:0204
F4200: FF 255 RES
F4201: FF 255 RES
F4202: CD 205 =
F4203: 21 033 !
F4204: CF 202 ↴
F4205: 00 000 NULL
F4206: 00 000 NULL
F4207: 00 000 NULL
F4208: 00 000 NULL
F4209: 00 000 NULL
F420A: 00 000 NULL
F420B: 00 000 NULL
F420C: 00 000 NULL
F420D: 00 000 NULL
F420E: 00 000 NULL
F420F: 00 000 NULL
F4210: 00 000 NULL
F4211: 00 000 NULL
F4212: 00 000 NULL
F4213: 00 000 NULL
F4214: 00 000 NULL
...
BIOS DI
INT 021h
IRET



