

## 25)SWAPPING OF 2 8BIT NUMBERS

The screenshot displays the 68000 Assembler interface with the following components:

- Registers:** A (0A), BC (00), DE (0A), HL (1E), PSW (00), PC (42), SP (FF), Int-Reg (00). Flags: S (0), Z (0), AC (0), P (0), C (0).
- Assembly Code:**

```
1 LDA 8000
2 MOV B, A
3 LDA 8001
4 MOV D, A
5 XCHG
6 MOV A, H
7 STA 8000
8 MOV A, D
9 STA 8001
10 HLT
```
- Memory View:**

Address (Hex)	Address	Data
1F40	8000	30
1F41	8001	10
1F42	8002	0
1F43	8003	0
1F44	8004	0
1F45	8005	0
1F46	8006	0
1F47	8007	0
1F48	8008	0
1F49	8009	0
1F4A	8010	0
1F4B	8011	0
1F4C	8012	0
1F4D	8013	0
- Assembler Message:** 0 Program assembled successfully

The second screenshot shows the same interface after assembly, with the memory view updated to reflect the swapped values: 30 at 8000 and 10 at 8001.