```asm
 1   ;EXPT-1C:SIMPLE ALP 8051 MICROCONTROLLER
 2   ;PROBLEM STSTEMENT: A two digit BCD number to be stored in location 30h.
 3   ;Write ALP to unpack this BCD number. Store the MSB in R1 and LSB in R0.
 4   ;Find Product of Both these and store result in packed BCD in 31h.
 5   ;NAME: Anil Rajpurohit
 6   ;ROLL NO- 312046, BATCH: B2
 7   ;DATE OF PERFORMANCE: 11/07/18
 8
 9           ORG 0000H
10
11           MOV 30H,#46H    ;STORE BCD NUMBER TO 30H LOCATION
12           MOV A,30H       ;A = 46H, packed BCD from 30H location
13           ANL A,#0FH      ;MASK THE UPPER nibble (A = 06)
14           MOV R0,A        ;LSB IN R0
15           MOV A,30H       ;GET ORIGNAL DATA
16           ANL A,#0F0H     ;MASK LOWER nibble (A = 40)
17           RL A            ;ROTATE LEFT
18           RL A            ;ROTATE LEFT
19           RL A            ;ROTATE LEFT
20           RL A            ;ROTATE LEFT (A=04)
21           MOV R1,A        ;STORE MSB IN R1
22           MOV B,R1        ;MSB COPIED TO REGISTER B
23           MOV A,R0        ;LSB COPIED TO REGISTER A
24           MUL AB          ;MULTIPLICATION OF LSB AND MSB DONE
25           MOV B,#0AH      ;store 0x0A in B
26           DIV AB          ;divide A by B
27           SWAP A          ;we get decimal number stored in a swap it
28           ORL A,B         ;logical or to get packed BCD
29           MOV 31H,A       ;STORE DATA IN 31 LOCATION
30
31           END
32
33
34
```