PROGRAM TO CONVERT HEX NUMBER TO ASCII

LDA 2050H

MOV B,A

ANI 0FH

CALL SUB1

STA 2051H

MOV A,B

ANI 0F0H

RLC

RLC

RLC

RLC

CALL SUB1

STA 2052H

HLT

SUB1:CPI 0AH

JC SKIP

ADI 07H

SKIP:ADI 30H

RET

### 

### Assembler Output

|  |  |  |
| --- | --- | --- |
| 1 | 3A 50 20 | LDA 2050H |
| 2 | 47 | MOV B,A |
| 3 | E6 0f | ANI 0FH |
| 4 | CD 1a 08 | CALL SUB1 |
| 5 | 32 51 20 | STA 2051H |
| 6 | 78 | MOV A,B |
| 7 | E6 f0 | ANI 0F0H |
| 8 | 07 | RLC |
| 9 | 07 | RLC |
| 10 | 07 | RLC |
| 11 | 07 | RLC |
| 12 | CD 1a 08 | CALL SUB1 |
| 13 | 32 52 20 | STA 2052H |
| 14 | 76 | HLT |
| 15 | FE 0a | SUB1:CPI 0AH |

PROGRAM TO MULTIPLY TWO 8 BIT NUMBERS

LXI H,2050H

MOV B,M

INX H

MOV C,M

MVI A,00H

LOOP:ADD B

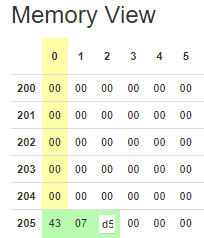
DCR C

JNZ LOOP

INX H

MOV M,A

HLT



### Assembler Output

|  |  |  |
| --- | --- | --- |
| 1 | 21 50 20 | LXI H,2050H |
| 2 | 46 | MOV B,M |
| 3 | 23 | INX H |
| 4 | 4E | MOV C,M |
| 5 | 3E 00 | MVI A,00H |
| 6 | 80 | LOOP:ADD B |
| 7 | 0D | DCR C |
| 8 | C2 08 08 | JNZ LOOP |
| 9 | 23 | INX H |
| 10 | 77 | MOV M,A |
| 11 | 76 | HLT |

#PROGRAM TO COUNT NO OF 1’S IN A GIVEN DATA

MVI B,00H

MVI C,08H

LDA 3000H

L2:RAR

JNC L1

INR B

L1:DCR C

JNZ L2

MOV A,B

STA 3001H

HLT

### Assembler Output

|  |  |  |
| --- | --- | --- |
| 1 | 06 00 | MVI B,00H |
| 2 | 0E 08 | MVI C,08H |
| 3 | 3A 00 30 | LDA 3000H |
| 4 | 1F | L2:RAR |
| 5 | D2 0c 08 | JNC L1 |
| 6 | 04 | INR B |
| 7 | 0D | L1:DCR C |
| 8 | C2 07 08 | JNZ L2 |
| 9 | 78 | MOV A,B |
| 10 | 32 01 30 | STA 3001H |
| 11 | 76 | HLT |

