PRACTICAL – 21

AIM: **Multiply two 8-bit numbers stored in memory locations 4001H and 4006H by repetitive addition and store the result at 400AH location.(Use Data Set -3) (Note: Student need to implement FOR loop in this program: initialization, Compare, Decrement/Increment; also need to use JMP, JMx instructions**.)

CODE:

```
org 100h

MOV [4001H],05H
MOV [4006H],04H

MOV CL,[4006H]
MOV BL,[4001H]

ABC:

ADD [400AH],BL
LOOP ABC

ret
```

OUTPUT:

```
Random Access Memory                                    —    □    ✕

  0700:400A        update        ⦿ table    ○ list

0700:400A   14 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00    ¶...............
0700:401A   00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00    ................
0700:402A   00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00    ................
0700:403A   00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00    ................
0700:404A   00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00    ................
0700:405A   00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00    ................
0700:406A   00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00    ................
0700:407A   00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00
```

CONCLUSION: We have learned about how to multiply two 8-bit numbers stored in memory locations 4001H and 4006H by repetitive addition and store the result at 400AH location.