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Write an assembly language program for adding 10 numbers stored in memory using loop and store the MSB in D and LSB in A in 8085 microprocessor.

Program:

```
MVI C,10 ;counter
MVI D,00 ;MSB Byte
MVI A,00 ;LSB Byte
LXI H,2051
BACK: MOV B,M
ADD B
JNC NEXT
INR D
NEXT: INX H
DCR C
JNZ BACK
STA 2061
MOV A,D
STA 2062
HLT
```

Result:

| Memory Location | Data value |
|-----------------|------------|
| 2051 | 1 |
| 2052 | 2 |
| 2053 | 3 |
| 2054 | 4 |
| 2055 | 5 |
| 2056 | 6 |
| 2057 | 7 |
| 2058 | 8 |
| 2059 | 9 |
| 2060 | 10 |
| 2061 | 55 |
| 2062 | 0 |