All Online Learning

www.allonlinelearning.com

Write an assembly language program of prime number in 8085 microprocessor

```
LDA 2029;A=5
MVI C,00 ;STORE NO OF DIVISOR OF N
MOV E,A; iterator for the loop from n to 1.
LOOP1: MOV B,A; B permanently stores n
LOOP2: MOV D,E; D as the divisor
CMP D
JC DLN
SUB D ; Division: Keep subtracting D from A
    ;till the value in A either becomes 0
    ; or less than 0
JNZ LOOP2
DLN: CPI 0
JNZ NT
INR C
NT: MOV A,B
DCR E
JNZ LOOP1
MOV A,C
MVI C,00
CPI 02
JNZ COMPOSITE
INR C
COMPOSITE: MOV A,C
STA 2030
```