

CEN 214 Microprocessors

Lab Assignment 10

PUSH sourceOperand

Decrements the stack pointer and then stores the source operand on the top of the stack.

POP destinationOperand

Loads the value from the top of the stack to the location specified with the destination operand (or explicit op-code) and then increments the stack pointer. The destination operand can be a general purpose register, memory location, or segment register.

Algorithm:

- $SP = SP - 2$
- $SS:[SP]$ (top of the stack) = operand

Example:

```
MOV AX, 1234h
PUSH AX
POP DX ; DX = 1234h
RET
```

Question:

- Fibonacci'nin ilk 24 terimini hesaplayıp bunları büyükten küçüğe doğru 2000h adresinden başlayarak yazdıran programın kodunu yazınız.
- Write a program that calculates first 24 Fibonacci numbers and stores numbers in descending order in memory starting at 2000H.