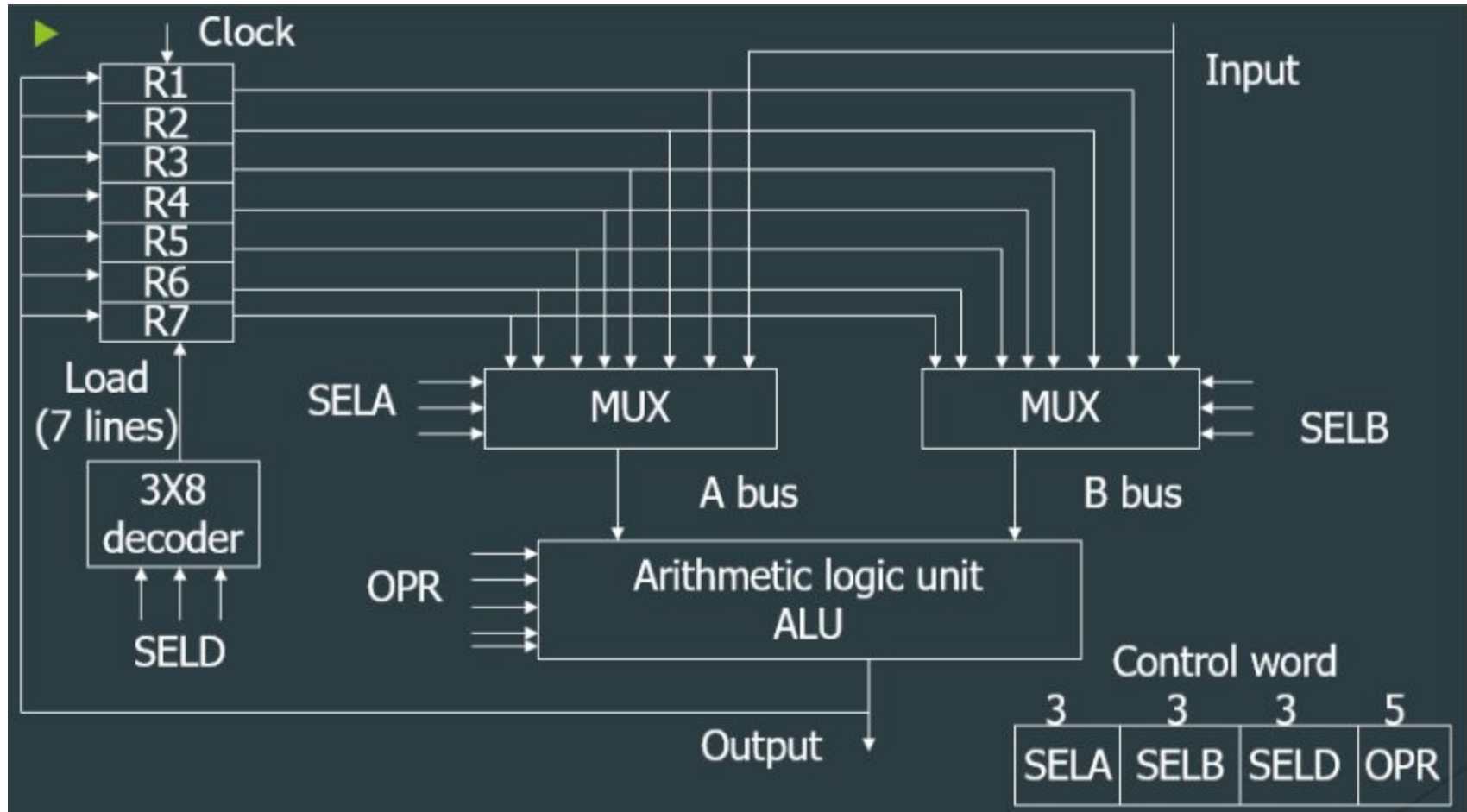


# Computer Processing Unit Organization

## General register organization components

- Storage - registers, flip-flops
- Execution- ALU
- Transfer- bus
- Control- control unit

# General register organization



## Register Selection Field Encoding

Binary Code	SELA	SELB	SELD
000	Input	Input	None
001	R1	R1	R1
010	R2	R2	R2
011	R3	R3	R3
100	R4	R4	R4
101	R5	R5	R5
110	R6	R6	R6
111	R7	R7	R7

**AL**

OPR Select	Operation	Symbol
00000	Transfer A	TSFA
00001	Increment A	INCA
00010	Add A + B	ADD
00101	Subtract A - B	SUB
00110	Decrement A	DECA
01000	ADD A and B	AND
01010	OR A and B	OR
01100	XOR A and B	XOR
01110	Complement A	COMA
10000	Shift right A	SHRA
11000	Shift left A	SHLA

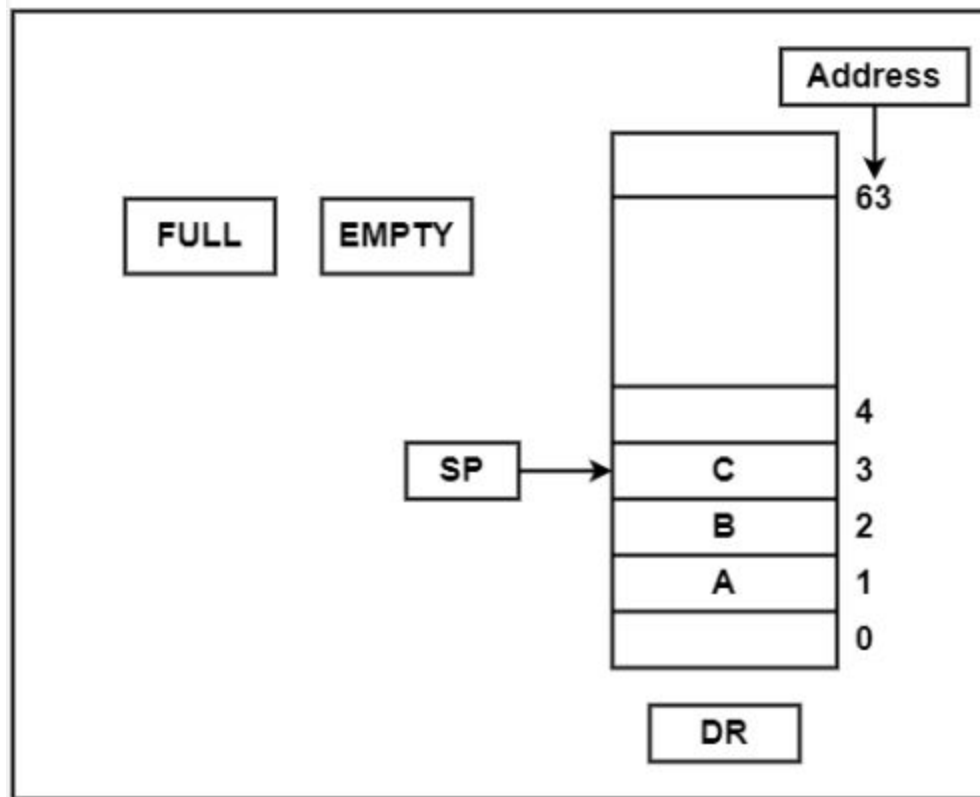
# Stack operation

## Register stack

- PUSH operation
- POP operation

**Write down the steps for both the operation**

# 64-word Stack



## Memory stack

- PUSH operation
- POP operation

**Write down the steps for both the operation**

