* Topic - Giving Instructions to CPU to perform tasks
* CPUs combine an ALU, control unit, memory, and clock to perform tasks based on instructions.
* Instructions are sequences of opcodes and addresses/registers that control CPU operations.
* Instructions are stored in memory, allowing for easy program modification and control by software.
* Basic instructions include LOAD, STORE, ADD, and SUBTRACT, enabling simple arithmetic operations.
* JUMP and JUMP\_NEGATIVE instructions allow for program flow control and conditional execution.
* HALT instruction signifies the end of a program and prevents infinite loops.
* Modern CPUs use larger instruction lengths (32-64 bits) and variable-length instructions, increasing instruction capacity and flexibility.