Group 15 Opcodes and Mnemonics

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| Opcode | | | Description |
| Binary | Mnemonic |  | |
| 0000 | Halt | Terminate the program. | |
| 0001 | Load X | Load the contents of address X into AC. | |
| 0010 | Store X | Store the contents of AC to address X. | |
| 0011 | Subt X | Subtract the contents of address X from AC and store the result in AC. | |
| 0100 | Add X | Add the contents of address X to AC and store the result in AC. | |
| 0101 | Input | Input a value from the keyboard into AC. | |
| 0110 | Output | Output the value in AC to the display. | |
| 0111 | Skipcond | Skip the next instruction on condition. | |
| 1000 | Jump X | Load the value of X into PC. | |
| 1001 | Load C | Load the constant value of the operand in the accumulator | |
| 1010 | AND | Perform bitwise AND operation on value in AC and value from memory address X | |
| 1011 | OR | Perform bitwise OR operation on value in AC and value from memory address X | |
| 1100 | NOT | Perform bitwise NOT operation on value in AC | |
| 1101 | XOR | Perform bitwise XOR operation on value in AC and value from memory address X | |
| 1110 | ShiftL | Shifts the bits of AC to the left (1 bit shift) | |
| 1111 | ShiftR | Shifts the bits of AC to the right (1 bit shift) | |

Skipcond will jump to the next instruction if the value in the AC is equal to 0 by incrementing the PC by 1. If the AC is not equal to 0, the program counter only increments at the end of the FDE cycle.