4 BIT MULTIPLIER

EEE184.1 M67 - Microprocessor, Microcontroller Systems and Design Laboratory

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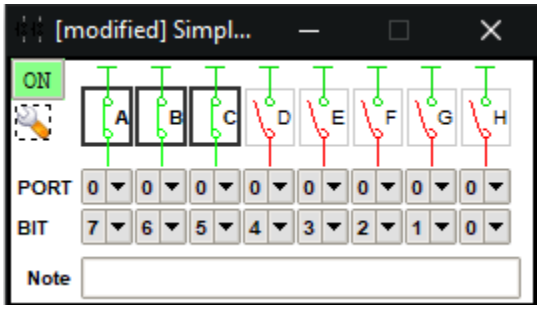
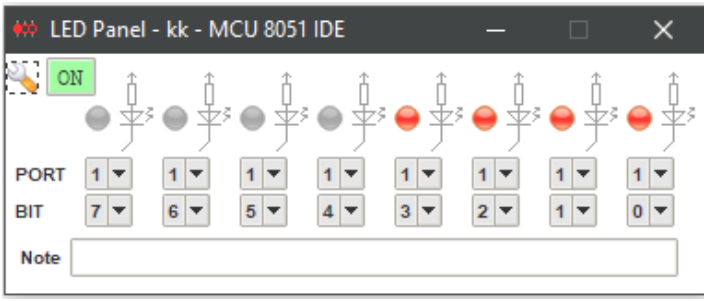
This code initializes P0 and P1 registers with specific values and then enters a loop. Inside the loop, it performs bitwise operations, multiplication, and complementation on the registers P0, B, and A. The result of these operations is then stored in register P1. The loop continues indefinitely until the program is manually terminated.

Keyboard (Input):

A	B	C	D	E	F	G	H



LED (Output):



A B C D
x E F G H

LED output in binary

Code:

```
ORG 0

MOV P0, #0FFH
MOV P1, #00H

LOOP:
   MOV B, P0
  ANL B, #0FH

   MOV A, P0
 ANL A, #0F0H
   SWAP A

   MUL AB
   CPL A

   MOV P1, A
 SJMP LOOP

END:
     END
```

DEMO:

3 x 3 = 9