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Activity 1.

```
TOGGLE:
        MOV     A, #55H     ; A  <- 01010101B
        MOV     P0, A       ; P0 <- 01010101B
        MOV     P1, A       ; P1 <- 01010101B
        MOV     P2, A       ; P2 <- 01010101B

        ACALL   DELAY

        MOV     A, #0AAH    ; A  <- 10101010B
        MOV     P0, A       ; P0 <- 10101010B
        MOV     P1, A       ; P1 <- 10101010B
        MOV     P2, A       ; P2 <- 10101010B

        ACALL   DELAY
        SJMP    TOGGLE

DELAY:
        MOV     R0, #250
        LOOP0:  MOV     R1, #164
        LOOP1:  DJNZ    R1, LOOP1
                DJNZ    R0, LOOP0
        RET
END
```

Activity 2.

```
        MOV     P0, #0      ; P0 = OUTPUT
        MOV     P2, #0      ; P1 = OUTPUT

        MOV     A, P1       ; A  <- P1
        MOV     P0, A       ; P0 <- P1
        MOV     P2, A       ; P2 <- P1
        MOV     R0, A       ; R0 <- P1
        MOV     R1, A       ; R1 <- P1
        MOV     R2, A       ; R2 <- P1

END
```

Activity 3.

1. Upon reset, all the ports of the 8051 are configured as **input**.
2. To make all the bits of a port an output port we must write **0** hex to it.
3. Which ports of the 8051 are bits addressable?
   Ans: P0, P1, P2, and P3.
4.

```
MOV      P1, #0              ; P1 = OUTPUT
HIGH:
         JB       P2.4, HIGH
         MOV      P1, #55H
END
```