Flowchart 1: main()

Start main()

↓

Initialize buttons, LEDs & create var1 & var2

↓

Activate button interrupt

↓

Comp(var1,var2)

↓

delay

(delay loops back to Comp(var1,var2))

Flowchart 2: Button ISR

Button ISR

↓

Which button?

- P1.2 → Increment var1
- P1.1 → Decrement var1

↓

Clear port 1 flags & interrupt vector

↓

Return

Flowchart 3: Assembly - comp(var1,var2)

Assembly - comp(var1,var2)

↓

var1<var2?

- Yes → Turn on Red LED / Turn off Green LED → Return
- No → Turn on Red LED / Turn off Green LED → Return