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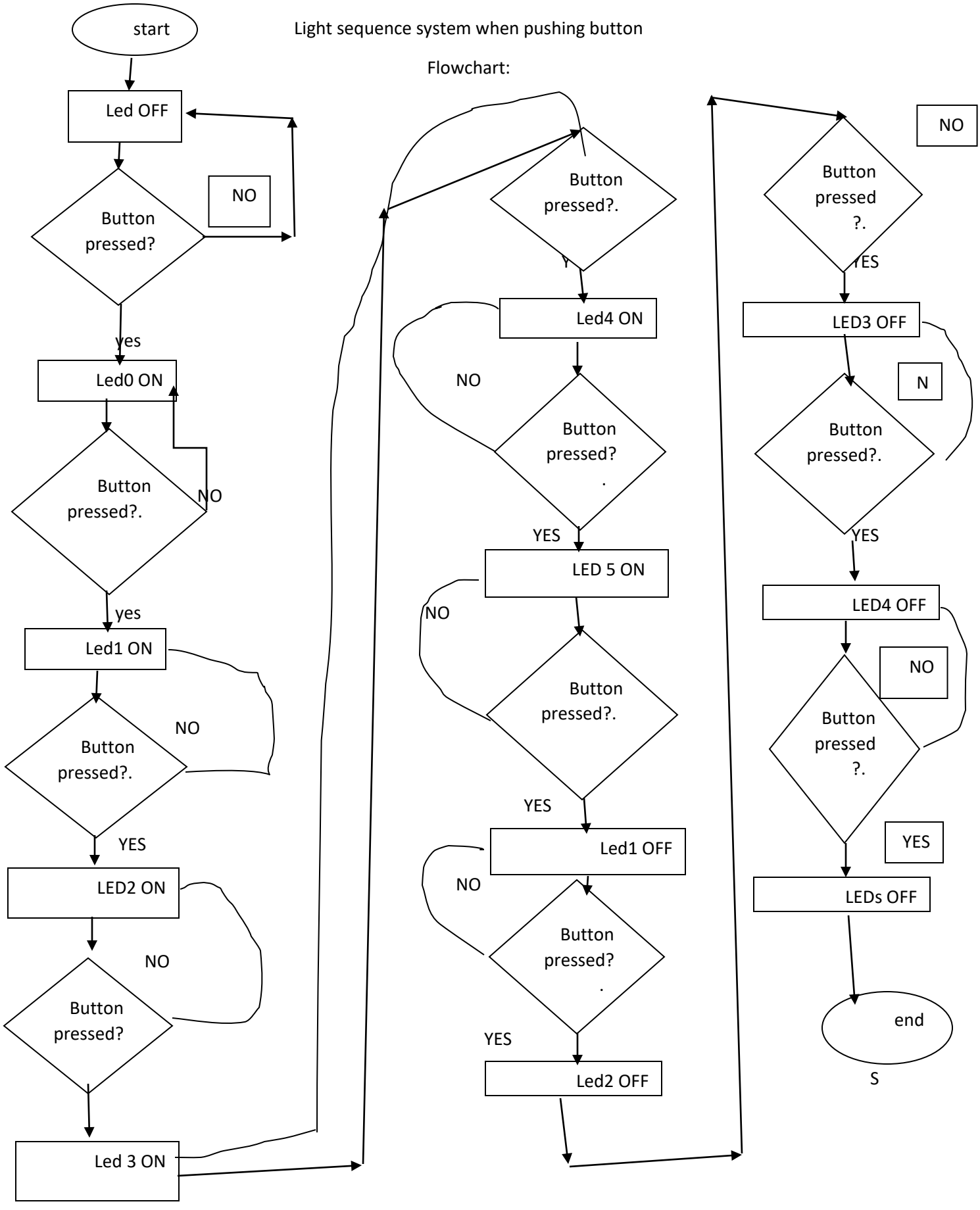
LEDs lighting sequence

Description:

Light sequence system when pushing button

Flowchart:



Layered architecture

Application
ECUAL(led +button)
MCAL(timer+DIO)
Microcontroller

APIs

;void ADC_Init(void)

;Uint16t ADC_Read(void)

;void BTN0_Init(void)

;Uint8t BTN0_GetValue(void)

/*Functions for PINS*/

/*void DIO_SetPin_Direction(Uint8t port, Uint8t pin, Uint8t direction);/*Define Direction for pin(Ip/Op)

/*void DIO_SetPin_Value(Uint8t port, Uint8t pin, Uint8t value);/*Output Mode

/*void DIO_TogglePin(Uint8t port, Uint8t pin);/*Toggle Output Mode

/*void DIO_ReadPin_Value(Uint8t port, Uint8t pin, Uint8t* value);/*Input Mode

/*Functions for PORTS*/

/*void DIO_SetPort_Direction(Uint8t port, Uint8t direction);/*Define Direction for Port(Ip/Op)

/*void DIO_SetPort_Value(Uint8t port, Uint8t value);/*Output Mode

/*void DIO_TogglePort(Uint8t port);/*Toggle Output Mode

/*void DIO_ReadPort_Value(Uint8t port, Uint8t* value);/*Input Mode

/*Activate Pull up Resistor*/

;void DIO_SetPULLUP(Uint8t port, Uint8t pin)

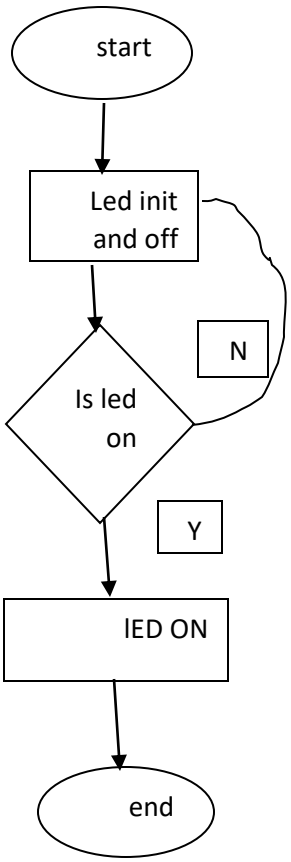
;void LED0_Init(void)

;void LED0_ON(void)

;void LED0_OFF(void)

;void LED0_Toggle(void)

LED FLOW chart



Button flowchart