

Output

Before execution		
Name	Value	Type
* A	0x00	char
<Enter expression>		

After execution		
Name	Value	Type
* A	0x00	char
<Enter expression>		

Before execution		
Name	Value	Type
* A	0x01	char
<Enter expression>		

Before execution		
Name	Value	Type
* A	0x00	char
<Enter expression>		

Experiment - 2c

Aim: Write an ALP to generate hex up counter

Tools required: Keil M vision 5

Code:

```
ORG 0000H
LDR R0, 0000H
ORR R1, 0000H
MOV A, #00H
UP: LCALL DELAY
    INC A
    CSNE A, #100H, UP
    LCALL DOB3H
    DELAY: MOV R0, #0FFH
    BACK1: MOV R1, #0FFH
    BACK2: MOV R2, #0FFH
    HERE: DJNZ R2, HERE
    DJNZ R1, BACK1
    DJNZ R0, BACK2
    RET
END
```

Result: An ALP to generate Hex upcounter is executed successfully.

Output

Before execution

Name	value	Type
* A	0x00	char
<Enter expression>		

After execution

Name	value	Type
* A	0x00	char
<Enter expression>		

Name	value	Type
* A	0x00	char
<Enter expression>		

Name	value	Type
* A	0x00	char
<Enter expression>		

Name	value	Type
* A	0x30'0'	char
<Enter expression>		

Experiment 3a

Aim: Write an ALP to generate BCD up counter

Tools required: Keil Y vision

Code: ORG 0000H

LJMP 8000H

ORG 8000H

MOV A, #00H

UP:LCALL DELAY

ADD A, #01H

DAA

CJNE A, #30H, UP

LCALL 0003H

DELAY: MOV R0, #0FFH

BACK1: MOV R1, #0FFH

BACK: MOV R2, #0FFH

HERE: DJNZ R2, HERE

DSNZ R1, BACK

DSNZ R0, BACK1

RET

END

Result: An ALP to generate BCD up counter is executed successfully

Program to turn on the Buzzer

```
#include <REG52.h>
#define buz P1
sbit SW=P2^0;
long int i;
void main()
{
while(1)
{
    if(SW==0)
    {
        for(i=0;i<=90000;i++);
        if(SW==0)
        {
            while(SW==0);
            buz=0x01; // ON Buzzer
            for(i=0;i<4500;i++); // Delay
            buz=0x00; // OFF Buzzer
            for(i=0;i<4500;i++); // Delay
        }
    }
}
```

```
#include<reg52.h>
sbit relay_pin = P2^0;
void Delay_ms(int);
void main()
{
    do
    {
        relay_pin = 0; //Relay ON
        Delay_ms(1000);
        relay_pin = 1; //Relay OFF
        Delay_ms(1000);
    }while(1);
}
void Delay_ms(int k)
{
    int j;
    int i;
    for(i=0;i<k;i++)
    {
        for(j=0;j<100;j++)
    }
}
```

References Mailings Review View Picture Tools Format

Picture Styles

Picture Shape
Picture Border
Picture Effects
Position

```
#include<reg52.h> // special function register declarations
                    // for the intended 8051 derivative
sbit LED = P2^0; //Defining LED pin
void Delay(void); // Function prototype declaration
void main (void)
{
    while(1)          //infinite loop
    {
        LED = 0; // LED ON
        Delay();
        LED = 1; // LED OFF
        Delay();
    }
}
void Delay(void)
{
    int j;
    int i;
    for(i=0;i<10;i++)
    {
        for(j=0;j<10000;j++)
        {
            }
        }
}
```