**3) Interface 7 segment with 8051 and write an embedded C program to display numbers 00 to 99.**

#include <REG51.h>

#define SEGPORT P2

#define SS\_TENS 0x10

#define SS\_ONES 0x20

const unsigned char LookupTable[] = {

0x3F, 0x06, 0x5B, 0x4F, 0x66,

0x6D, 0x7D, 0x07, 0x7F, 0x6F

};

void DELAY\_ms(unsigned long x)

{

unsigned int i, j;

for (i = 0; i < x; i++)

for (j = 0; j < 500; j++);

}

void main()

{

int cnt, temp, num, i;

P2 = 0x00;

P3 = 0xFF;

while (1)

{

for (cnt = 0; cnt <= 99; cnt++)

{

for (i = 0; i < 30; i++)

{

num = cnt;

temp = num / 10;

P3 = SS\_TENS;

SEGPORT = LookupTable[temp];

DELAY\_ms(1);

P3 = 0xFF;

temp = num % 10;

P3 = SS\_ONES;

SEGPORT = LookupTable[temp];

DELAY\_ms(1);

P3 = 0xFF;

}

}

}

}