**6) Write an embedded C program to display “Nashik” on first line of 16 X 2 LCD display.**

#include<reg51.h>

#define lcd P1

sbit rs = P2^2;

sbit rw = P2^1;

sbit en = P2^0;

void lcd\_init();

void cmd(unsigned char);

void dat(unsigned char);

void lcd\_string(unsigned char \*);

void delay(unsigned int);

void main() {

lcd\_init();

while(1) {

cmd(0x80); // First line, position 0

lcd\_string("NASHIK");

}

}

void lcd\_init() {

cmd(0x38);

cmd(0x0E);

cmd(0x06);

cmd(0x01);

delay(2000);

}

void cmd(unsigned char x) {

lcd = x;

rs = 0;

rw = 0;

en = 1;

delay(1);

en = 0;

}

void dat(unsigned char y) {

lcd = y;

rs = 1;

rw = 0;

en = 1;

delay(1);

en = 0;

}

void lcd\_string(unsigned char \*s) {

while(\*s) {

dat(\*s++);

}

}

void delay(unsigned int z) {

unsigned int i, j;

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

for(j = 0; j < 1275; j++);

}