// Problem statement: Write a program in C language to toggle all the LEDs

// interfaced to PORT2 of 8051/89C51 continuously with a delay of 100 ms.

// Roll No. : 32410

#include <reg51.h>

void msDelay(unsigned int); // Function to generate delay

void main(void) {

while (1) {

P2 = 0x00; // Turn off all LEDs on PORT2

msDelay(100); // Delay of 100 ms

P2 = 0xFF; // Turn on all LEDs on PORT2

msDelay(100); // Delay of 100 ms

}

}

void msDelay(unsigned int t) { // Function to generate delay

unsigned int i, j;

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

for (j = 0; j < 1275; j++) {} // Delay loop

}

//Hex

#include <reg51.h>

void msDelay(unsigned int);

void main(void) {

unsigned int a;

P2 = 0x00;

for (a = 0; a <= 255; a++) {

P2 = a;

msDelay(500);

}

// Decrement P2 from 255 to 0

for (a = 255; a > 0; a--) {

P2 = a;

msDelay(500);

}

P2 = 0x00;

}

void msDelay(unsigned int t) {

unsigned int i, j;

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

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

}