#include <REGX51.H>

char i,Step = 0;

char StepPattern[4][2] = {{0x03, 0x09}, {0x06, 0x03}, {0x0C, 0x06}, {0x09, 0x0C}}; // Define the 2-phase excitation pattern for clockwise and counterclockwise

void Delay\_ms(int tx) {

char ti;

while(tx--)

for(ti = 0; ti < 101; ti++);

}

void main(void) {

while(1) {

if (P2\_7) {

for (i = 0; i < 4; i++) {

Step = StepPattern[i][0];

P0 = Step;

P2 = Step | 0xF0;

if (P2\_6)

Delay\_ms(200);

else

Delay\_ms(10);

}

} else {

for (i = 3; i >=0; i--) {

Step = StepPattern[i][1];

P0 = Step;

P2 = Step | 0xF0;

if (P2\_6)

Delay\_ms(200);

else

Delay\_ms(10);

}

}

}

}