```
#include <reg52.h>
# include <stdio.h>
void    delay (int);
void main ()
{
    do
    {
    P2    = 0X01       // 0001
    delay (1000);
    P2 = 0X02     ; // 0010
    delay (1000)
    P2 = 0X04 ; // 0100
    delay (1000);
    P2 = 0X08 ; // 1000
    } delay (1000);

    } while (1) ;

    void delay (int k)
    {
    int i,j;
    for (i = 0; i<K ; i++)
    {
        for (j = 0; j<100; j++)
        { }
    }
}
```

Full DRIVE:

```c
#include<reg52.h>
#include<stdio.h>
void delay(int)
void main()
{
    do {
    P2 = 0x03;    //0011
    delay(1000);      //0100
    P2 = 0x06;
    delay(1000);
    P2 = 0x0C;       //111100
    delay(1000);
    P2 = 0x09;      //111001
    delay(1000);
    }
    while (1);

    void delay(int k)
    {
    int i,j;
    for(i=0; i<k; i++)
    {
        for(j=0; j<100; j++)
    }
    }
}
```

HALF DRIVE:

```c
#include <reg52.h>
#include <stdio.h>
void delay (int)
void main ()
{
    do
    {
        P2 = 0x01;        //0001
        delay (1000);
        P2 = 0x03;        //0011
        delay (1000);
        P2 = 0x02;        //0010
        delay (1000);
        P2 = 0x06;        //0110
        delay (1000);
        P2 = 0x04;        //0100
        delay (1000);
        P2 = 0x0C;        //1100
        delay (1000);
        P2 = 0x08;        //1000
        delay (1000);
        P2 = 0x09;        //1001
        delay (1000);
    }
    while (1);
}
void delay (int k)
{
    int i, j;
    for (i=0; i< k; i++) { for (j=0; j<100; j++){}}}
```