

```
1  #include<reg51.h>
2  sbit load1= P1^0;
3  sbit load2= P1^1;
4  sbit load3= P1^2;
5  sbit load4= P1^3;
6  void main()
7  {
8  unsigned char X;
9  SCON=0X50;
10 TMOD=0X20;
11 TH1=-3;
12 TR1=1;
13 while(1)
14 {
15     while (RI==0);
16     X=SBUF;
17     SBUF=X;
18     while (TI==0);
19     TI=0;
20     RI=0;
21     if(X=='1')
22     {
23         load1=1;//load1 is off
24     }
25     if(X=='2')
26     {
27         load1=0;//load1 is on
28     }
29     if(X=='3')
30     {
31         load2=1;//load2 is off
32     }
33     if(X=='4')
34     {
35         load2=0;//load 2 is on
36     }
37     if(X=='5')
38     {
39         load3=1;//load 3 is off
40     }
41     if(X=='6')
42     {
43         load3=0;//load 3 is on
44     }
45     if(X=='7')
46     {
47         load4=1;//load 4 is off
48     }
49     if(X=='8')
50     {
51         load4=0;//load 4 is on
52     }
53     if(X=='0')
54     {
55         load1=load2=load3=load4=1;//all load are on
56     }
57     if(X=='9')
58     {
59         load1=load2=load3=load4=0;//all loads are off
60     }
61 }
62 }
```