WAVE DRIVE:-

```
#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:-

```
#include <reg52.h>
#include <stdio.h>
void delay (int);
void main ();
{
 do {
 P2 = 0X03 ; //0011
 delay (1000);
 P2 = 0X06 ; //0100
 delay (1000);
 P2= 0X0C; //1100
 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++)
 {}
 }
}
```

HALF DRIVE:-

```
#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++)
    {}
  }
}
```