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++)
        {}
     }
  }
```

speed is controlled by the delay.

FULL DRIVE:-

```
#include <reg52.h>
#include <stdio.h>
void delay (int);
void main()
{
do {
P2=0x03;   //0011,
delay(1000);
P2=0x06;   //0110
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++){}}}
```

0001 — 1
0011 — 3
0010 — 2
0110 — 6
0100 — 4
1100 — 0C
1000 — 8
1001 — 9