14/12/20 Microcontrollers 1BM19EE025

1] Drive a Stepper Motor interface to rotate the motor in anti-clockwise by N-steps. Introduce suitable delay b/w successive steps.

```
#include <stdio.h>
#include <reg51.h>
char xdata port _at_ 0xe803;
char xdata porta _at_ 0xe800;
char idata acc _at_ 0x30;

delay()
{
  int j;
  for(j=0; j<800; j++);
}
void main()
{
   port = 0x80;
   while(1)
   {
      acc = 0x11;
      porta = acc;
      delay();
      acc = 0x22;
      porta = acc;
      delay(); acc = 0x44; porta = acc; delay();
      acc = 0x88;
      porta = acc;
      delay();
   }
```

3] Design the stepper motor to rotate the motor in clockwise direction.

```
#include <stdio.h>
#include <reg51.h>
char xdata port_at_ 0xe803;
char xdata porta_at_ 0xe800;
char idata acc _at_ 0x300;

void delay
{
   for (int i=0; i<800; i++);
}
void main()
{
      port = 0x80;
      while(1)
      {
         acc = 0x88;
         porta=acc;
         delay();
         acc = 0x44;
         porta =acc;
         delay();
         acc = 0x22;
         porta = acc;
         delay();
         acc = 0x11;
         porta =acc;
         delay();
      }
}
```