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3D - Batch 2

LAB

Date: / /

8051 programs

Derive 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 () // Delay b/w the rotation of the motor
{
    int j;
    for (j=0; j<800; j++)
    {
    }
}

void main ()
{
    port = 0x80 ; // configure all the ports of 8255 as
                  output port

    while (1)
```

```
{
```

```
    acc = 0x11;
```

```
    port a = acc;
```

```
    delay();
```

```
    acc = 0x22;
```

```
    port a = acc;
```

```
    delay();
```

```
    acc = 0x44;
```

```
    port a = acc;
```

```
    delay();
```

```
    acc = 0x88;
```

```
    port a = acc;
```

```
    delay();
```

```
}
```

```
}
```