

## Code to interface 16x2 LCD with AT89C51

//Program to test LCD. Display single character "A"

```
#include<reg51.h>
```

```
#define cmdport P3
```

```
#define dataport P2
```

```
#define q 100
```

```
sbit rs = cmdport^0; //register select pin
```

```
sbit rw = cmdport^1; // read write pin
```

```
sbit e = cmdport^6; //enable pin
```

```
void delay(unsigned int msec) // Function to provide time delay in msec.
```

```
{
```

```
int i,j ;
```

```
for(i=0;i<msec;i++)
```

```
for(j=0;j<1275;j++);
```

```
}
```

```
void lcdcmd(unsigned char item) //Function to send command to LCD
```

```
{
```

```
dataport = item;
```

```
rs= 0;
```

```
rw=0;
```

```
e=1;
```

```
delay(1);
```

```
e=0;
```

```

}

void lcddata(unsigned char item) //Function to send data to LCD
{
    dataport = item;
    rs= 1;
    rw=0;
    e=1;
    delay(1);
    e=0;
}

void main()
{
    lcdcmd(0x38); // for using 8-bit 2 row mode of LCD
    delay(100);
    lcdcmd(0x0E); // turn display ON for cursor blinking
    delay(100);
    lcdcmd(0x01); //clear screen
    delay(100);
    lcdcmd(0x06); //display ON
    delay(100);
    lcdcmd(0x86); // bring cursor to position 6 of line 1
    delay(100);
    lcddata('A');
}

```