

The diagram illustrates a digital scale circuit using an AT89C51 microcontroller. The circuit components and their connections are as follows:

- AT89C51 Microcontroller:**
 - Pin 1:** Connected to RX.
 - Pin 2:** Connected to TX.
 - Pin 3:** Connected to RXD.
 - Pin 4:** Connected to TXD.
 - Pin 5:** Connected to CTS.
 - Pin 6:** Connected to DTR.
 - Pin 7:** Connected to RI.
 - Pin 8:** Connected to COMPM.
 - Pin 9:** Connected to RST.
 - Pin 10:** Connected to XTAL1.
 - Pin 11:** Connected to XTAL2.
 - Pin 12:** Connected to P0.0/A0.
 - Pin 13:** Connected to P0.1/A1.
 - Pin 14:** Connected to P0.2/A2.
 - Pin 15:** Connected to P0.3/A3.
 - Pin 16:** Connected to P0.4/A4.
 - Pin 17:** Connected to P0.5/A5.
 - Pin 18:** Connected to P0.6/A6.
 - Pin 19:** Connected to P0.7/A7.
 - Pin 20:** Connected to P2.0/A8.
 - Pin 21:** Connected to P2.1/A9.
 - Pin 22:** Connected to P2.2/A10.
 - Pin 23:** Connected to P2.3/A11.
 - Pin 24:** Connected to P2.4/A12.
 - Pin 25:** Connected to P2.5/A13.
 - Pin 26:** Connected to P2.6/A14.
 - Pin 27:** Connected to P2.7/A15.
 - Pin 28:** Connected to P3.0/RX.
 - Pin 29:** Connected to P3.1/TX.
 - Pin 30:** Connected to P3.2/INT0.
 - Pin 31:** Connected to P3.3/INT1.
 - Pin 32:** Connected to P3.4/T0.
 - Pin 33:** Connected to P3.5/T1.
 - Pin 34:** Connected to P3.6/INT2.
 - Pin 35:** Connected to P3.7/T2.
- Serial-to-Parallel Converter (P1):**
 - Pin 1:** RX.
 - Pin 2:** TX.
 - Pin 3:** RXD.
 - Pin 4:** TXD.
 - Pin 5:** CTS.
 - Pin 6:** DTR.
 - Pin 7:** RI.
 - Pin 8:** COMPM.
- 10k Potentiometer (RV1):**
 - Pin 1:** Connected to P3.4.
 - Pin 2:** Connected to P3.5.
 - Pin 3:** Connected to P3.6.
- Buzzer (BUZ1):**
 - Pin 1:** Connected to P3.7.
 - Pin 2:** Connected to P3.0.
- 7-Segment Display (D3):**
 - Pin 1:** Connected to P3.1.
 - Pin 2:** Connected to P3.2.
 - Pin 3:** Connected to P3.3.
 - Pin 4:** Connected to P3.4.
 - Pin 5:** Connected to P3.5.
 - Pin 6:** Connected to P3.6.
 - Pin 7:** Connected to P3.7.
 - Pin 8:** Connected to P3.0.
 - Pin 9:** Connected to P3.1.
 - Pin 10:** Connected to P3.2.
 - Pin 11:** Connected to P3.3.
 - Pin 12:** Connected to P3.4.
 - Pin 13:** Connected to P3.5.
 - Pin 14:** Connected to P3.6.
 - Pin 15:** Connected to P3.7.
 - Pin 16:** Connected to P3.0.
 - Pin 17:** Connected to P3.1.
 - Pin 18:** Connected to P3.2.
 - Pin 19:** Connected to P3.3.
 - Pin 20:** Connected to P3.4.
 - Pin 21:** Connected to P3.5.
 - Pin 22:** Connected to P3.6.
 - Pin 23:** Connected to P3.7.
 - Pin 24:** Connected to P3.0.
 - Pin 25:** Connected to P3.1.
 - Pin 26:** Connected to P3.2.
 - Pin 27:** Connected to P3.3.
 - Pin 28:** Connected to P3.4.
 - Pin 29:** Connected to P3.5.
 - Pin 30:** Connected to P3.6.
 - Pin 31:** Connected to P3.7.
 - Pin 32:** Connected to P3.0.
 - Pin 33:** Connected to P3.1.
 - Pin 34:** Connected to P3.2.
 - Pin 35:** Connected to P3.3.
 - Pin 36:** Connected to P3.4.
 - Pin 37:** Connected to P3.5.
 - Pin 38:** Connected to P3.6.
 - Pin 39:** Connected to P3.7.
 - Pin 40:** Connected to P3.0.
 - Pin 41:** Connected to P3.1.
 - Pin 42:** Connected to P3.2.
 - Pin 43:** Connected to P3.3.
 - Pin 44:** Connected to P3.4.
 - Pin 45:** Connected to P3.5.
 - Pin 46:** Connected to P3.6.
 - Pin 47:** Connected to P3.7.
 - Pin 48:** Connected to P3.0.
 - Pin 49:** Connected to P3.1.
 - Pin 50:** Connected to P3.2.
 - Pin 51:** Connected to P3.3.
 - Pin 52:** Connected to P3.4.
 - Pin 53:** Connected to P3.5.
 - Pin 54:** Connected to P3.6.
 - Pin 55:** Connected to P3.7.
 - Pin 56:** Connected to P3.0.
 - Pin 57:** Connected to P3.1.
 - Pin 58:** Connected to P3.2.
 - Pin 59:** Connected to P3.3.
 - Pin 60:** Connected to P3.4.
 - Pin 61:** Connected to P3.5.
 - Pin 62:** Connected to P3.6.
 - Pin 63:** Connected to P3.7.
 - Pin 64:** Connected to P3.0.
 - Pin 65:** Connected to P3.1.
 - Pin 66:** Connected to P3.2.
 - Pin 67:** Connected to P3.3.
 - Pin 68:** Connected to P3.4.
 - Pin 69:** Connected to P3.5.
 - Pin 70:** Connected to P3.6.
 - Pin 71:** Connected to P3.7.
 - Pin 72:** Connected to P3.0.
 - Pin 73:** Connected to P3.1.
 - Pin 74:** Connected to P3.2.
 - Pin 75:** Connected to P3.3.
 - Pin 76:** Connected to P3.4.
 - Pin 77:** Connected to P3.5.
 - Pin 78:** Connected to P3.6.
 - Pin 79:** Connected to P3.7.
 - Pin 80:** Connected to P3.0.
 - Pin 81:** Connected to P3.1.
 - Pin 82:** Connected to P3.2.
 - Pin 83:** Connected to P3.3.
 - Pin 84:** Connected to P3.4.
 - Pin 85:** Connected to P3.5.
 - Pin 86:** Connected to P3.6.
 - Pin 87:** Connected to P3.7.
 - Pin 88:** Connected to P3.0.
 - Pin 89:** Connected to P3.1.
 - Pin 90:** Connected to P3.2.
 - Pin 91:** Connected to P3.3.
 - Pin 92:** Connected to P3.4.
 - Pin 93:** Connected to P3.5.
 - Pin 94:** Connected to P3.6.
 - Pin 95:** Connected to P3.7.
 - Pin 96:** Connected to P3.0.
 - Pin 97:** Connected to P3.1.
 - Pin 98:** Connected to P3.2.
 - Pin 99:** Connected to P3.3.
 - Pin 100:** Connected to P3.4.

The virtual terminal window at the bottom right shows the serial data output: "44.00".

```

1  #include <reg52.h>           //头文件
2  #define uchar unsigned char  //宏定义无符号字符型
3  #define uint unsigned int    //宏定义无符号整型
4  uchar duan[10]={0xc0,0xf9,0xa4,0xb0,0x99,0x92,0x82,0xf8,0x80,0x90};
5  //所需的段的位码0~9
6  uchar duan1[10]={0x40,0x79,0x24,0x30,0x19,0x12,0x02,0x78,0x00,0x10};
7  //所需的段的位码0~9
8  uchar wei[4]={0x01,0x02,0x04,0x08};
9  //位控制码
10 sbit ST=P3^5;
11 //A/D启动转换信号
12 sbit OE=P3^4;
13 //数据输出允许信号
14 sbit EOC=P3^2;
15 //A/D转换结束信号
16 sbit CLK=P3^3;
17 //时钟脉冲
18 uint z,x,c,v,AD0809, date;
19 //定义数据类型
20 uint qq;
21
22 sbit k1 = P2^0;
23 sbit k2 = P2^1;
24 sbit k3 = P2^2;
25 sbit k4 = P2^3;
26
27 sbit key1 = P2^4;
28 sbit key2 = P2^5;
29 sbit key3 = P2^6;
30 sbit key4 = P2^7;
31 sbit LED = P3^6;
32 sbit BUZ = P3^7;
33 char count = 0;
34 int tempL = 3000;
35 int tempH = 6000;

```

- 程序 (核心文件)
- 仿真 (核心文件)
- 开发资料
- 软件教程
- 注意事项
- 彩色原理图.pdf
- 仿真截图.png
- 黑白原理图.pdf
- 虚拟串口安装包.rar