

LCD

```
#include<lpc214x.h>
```

```
Void lcd_init(void);
```

```
Void wr_cn(void);
```

```
Void clr_disp(void);
```

```
Void delay(unsigned int);
```

```
Void lcd_com(void);
```

```
Void wr_dn(void);
```

```
Void lcd_data(void);
```

```
Unsigned char temp1;
```

```
Unsigned long int temp, r;
```

```
Unsigned char *ptr, disp[] = "pda,", disp1[] = "cse";
```

```
Int main() {
```

```
    IO0DIR = 0xFC;
```

```
    IO0PIN = 0x00;
```

```
    Delay(3200);
```

```
    Lcd_init();
```

```
    Delay(3200);
```

```
    Clr_disp();
```

```
    Delay(3200);
```

```
    Temp1 = 0x80;
```

```

    Lcd_com();

    Ptr = disp;

    While(*ptr) {
        Temp1 = *ptr;

        Lcd_data();

        Ptr++;
    }

    Temp1 = 0xC0;

    Lcd_com();

    Ptr = disp1;

    While(*ptr) {
        Temp1 = *ptr;

        Lcd_data();

        Ptr++;
    }

    While(1);
}

Void lcd_init(void) {
    Temp = 0x30; wr_cn(); delay(3200);

    Temp = 0x30; wr_cn(); delay(3200);

    Temp = 0x30; wr_cn(); delay(3200);

    Temp = 0x20; wr_cn(); delay(3200);

    Temp = 0x28; lcd_com(); delay(3200);

    Temp1 = 0x0C; lcd_com(); delay(800);

```

```
    Temp1 = 0x06; lcd_com(); delay(800);  
    Temp1 = 0x80; lcd_com(); delay(800);  
}
```

```
Void lcd_com(void) {  
    Temp = temp1 & 0xF0;  
    Wr_cn();  
    Temp = (temp1 & 0x0F) << 4;  
    Wr_cn();  
    Delay(500);  
}
```

```
Void wr_cn(void) {  
    IO0CLR = 0xFC;  
    IO0SET = temp;  
    IO0CLR = 0x04;  
    IO0SET = 0x08;  
    Delay(10);  
    IO0CLR = 0x08;  
}
```

```
Void wr_dn(void) {  
    IO0CLR = 0xFC;  
    IO0SET = temp;  
    IO0SET = 0x04;  
    IO0SET = 0x08;
```

```
    Delay(10);  
    IO0CLR = 0x08;  
}
```

```
Void lcd_data(void) {  
    Temp = temp1 & 0xF0;  
    Wr_dn();  
    Temp = (temp1 & 0x0F) << 4;  
    Wr_dn();  
    Delay(100);  
}
```

```
Void clr_disp(void) {  
    Temp1 = 0x01;  
    Lcd_com();  
    Delay(500);  
}
```

```
Void delay(unsigned int r1) {  
    For(r = 0; r < r1; r++);  
}
```