

Program for lcd_interfacing:

```
#include<lpc214x.h>

#define LCD_port 0x00FF0000

#define EN 1<<10

#define RS 1<<11

#define RW 1<<20

#define LCD_shift 16


void delay(unsigned int time)
{
    int i,j;
    for(i=0;i<time;i++)
        for(j=0;j<200;j++);
}

void LCD_strobe()
{
    delay(1000);
    IOSET0=EN;
    delay(1000);
    IOCLR0=EN;
    delay(1000);
}

void LCD_data(unsigned char ch)
{
    IOCLR1=LCD_port;
    IOSET1=ch<<LCD_shift;
    IOSET0=RS;
```

```
IOCLR0=RW;  
LCD_strobe();  
}
```

```
void LCD_cmd(unsigned char ch)  
{  
    IOCLR1=LCD_port;  
    IOSET1=ch<<LCD_shift;  
    IOCLR0=RS;  
    IOCLR0=RW;  
    LCD_strobe();  
}
```

```
void LCD_init(void)  
{  
    PINSEL0&=0XFF0FFFFF;  
    PINSEL1&=0XFFFFFFF;  
    PINSEL0&=0XFFFFFFF3;  
    IODIR0|=RS|EN|RW;  
    IODIR1|=LCD_port;  
    LCD_cmd(0x38);  
    LCD_cmd(0x06);  
    LCD_cmd(0x0C);  
    LCD_cmd(0x01);  
    LCD_cmd(0x80);  
    LCD_cmd(0x0E);  
}
```

```
void LCD_Display(int row,int pos,unsigned char*ch)
```

```
{
```

```
    unsigned char temp;
```

```
    if(row==1)
```

```
    {
```

```
        temp=0x80|(pos-1);
```

```
    }
```

```
    else
```

```
    {
```

```
        temp=0xc0|(pos-1);
```

```
    }
```

```
    LCD_cmd(temp);
```

```
    while(*ch)
```

```
    {
```

```
        LCD_data(*ch++);
```

```
    }
```

```
}
```

```
int main()
```

```
{
```

```
    LCD_init();
```

```
    LCD_Display(1,2,"welcome to");
```

```
    LCD_Display(2,5,"gce,karad");
```

```
    while(1)
```

```
    return 0;
```

```
}
```