

ASSIGNMENT NO 6
LCD Interfacing

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32243

```
#include <p18f4550.h>
#include "vector_relocate.h"

#define RS PORTEbits.RE0
#define RW PORTEbits.RE1
#define EN PORTEbits.RE2

void delay(unsigned int itime);
void lcd_cmd(unsigned char cmd);
void lcd_data(unsigned char data);
void lcd_init(void);

void lcd_cmd(unsigned char cmd){
    PORTD = cmd;
    RS = 0;
    RW = 0;
    EN = 1;
    delay(50);
    EN = 0;
    delay(50);
}

void lcd_data(unsigned char data){
    PORTD = data;
    RS = 1;
```

```
RW = 0;
EN = 1;
delay(50);
EN = 0;
delay(50);
}
```

```
void lcd_init(void){
    lcd_cmd(0x38);
    delay(50);
    lcd_cmd(0x0E);
    delay(50);
    lcd_cmd(0x06);
    delay(50);
    lcd_cmd(0x01);
    delay(50);
}
```

```
void delay(unsigned int itime){
    int i, j;
    for(i = 0; i < itime; i++){
        for(j = 0; j < 165; j++){

        }
    }
}
```

```
void main(){
```

```
unsigned char Name[7] = "MALHAR";  
unsigned char Sname[9] = "KULKARNI";  
unsigned int i, j;
```

```
ADCON1 = 0x0F ;  
delay(50);  
TRISD = 0x00;  
TRISE = 0x00;
```

```
lcd_init();  
delay(500);  
lcd_cmd(0x84);  
delay(500);
```

```
for(i = 0; i < 7; i++){  
    lcd_data(Name[i]);  
    delay(50);  
}
```

```
lcd_cmd(0xC3);  
delay(500);
```

```
for(j = 0; j < 6; j++){  
    lcd_data(Sname[j]);  
    delay(50);  
}  
}
```