



```
program UART_project
```

```
dim uart_rd as byte
```

```
dim LCD_RS as sbit at RB4_bit
```

```
dim LCD_EN as sbit at RB5_bit
```

```
dim LCD_D7 as sbit at RB3_bit
```

```
dim LCD_D6 as sbit at RB2_bit
```

```
dim LCD_D5 as sbit at RB1_bit
```

```
dim LCD_D4 as sbit at RB0_bit
```

```
dim LCD_RS_Direction as sbit at TRISB4_bit
```

```
dim LCD_EN_Direction as sbit at TRISB5_bit
```

```
dim LCD_D7_Direction as sbit at TRISB3_bit
```

```
dim LCD_D6_Direction as sbit at TRISB2_bit
```

```
dim LCD_D5_Direction as sbit at TRISB1_bit
```

```
dim LCD_D4_Direction as sbit at TRISB0_bit
```

```
dim output as char[1]
```

```
main:
```

```
TRISB = 0
```

```
PORTB = %11111111
```

```
ANSEL = 0
```

```
ANSELH = 0
```

```
Lcd_init()
```

```
Lcd_Cmd(_LCD_CLEAR)
```

```
UART1_Init(9600)          ' Initialize UART module at 9600 bps
```

```
Delay_ms(100)             ' Wait for UART module to stabilize
```

```
while (TRUE)              ' Endless loop
```

```
  if (UART1_Data_Ready() <> 0) then  ' If data is received,
```

```
    uart_rd = UART1_Read()          ' read the received data,
```

```
    UART1_Write(uart_rd)
```

```
    ByteToStr(uart_rd,output)
```

```
    Lcd_Out_Cp(output)              ' and send data via UART
```

```
  end if
```

```
wend
```

```
end.
```