

EXERCISE 05

Source Code

```
sbit LCD_RS at RB0_bit;
sbit LCD_EN at RB1_bit;
sbit LCD_D4 at RB4_bit;
sbit LCD_D5 at RB5_bit;
sbit LCD_D6 at RB6_bit;
sbit LCD_D7 at RB7_bit;

sbit LCD_RS_Direction at TRISB0_bit;
sbit LCD_EN_Direction at TRISB1_bit;
sbit LCD_D4_Direction at TRISB4_bit;
sbit LCD_D5_Direction at TRISB5_bit;
sbit LCD_D6_Direction at TRISB6_bit;
sbit LCD_D7_Direction at TRISB7_bit;

char txt1[] = "*****";
char i;
int pos1;

void Move_Delay() {
    Delay_ms(100);
}

void main(){
    CCP1CON = 0x00;
    T1CON = 0x00;
    VRCON = 0x00;
    INTCON = 0x00;
    CMCON = 0x07;

    Lcd_Init();
    Lcd_Cmd(_LCD_CLEAR);
    Lcd_Cmd(_LCD_CURSOR_OFF);
    Delay_ms(10);
    Lcd_Out(1,1,txt1);
    Move_Delay();

    while(1) {
        pos1=5;
        // Move outward
        for(i = 1; i < 17; i++) {
            Lcd_Cmd(_LCD_CLEAR);
            Lcd_Out(1,i,txt1);
            Move_Delay();
        }
    }
}
```

```

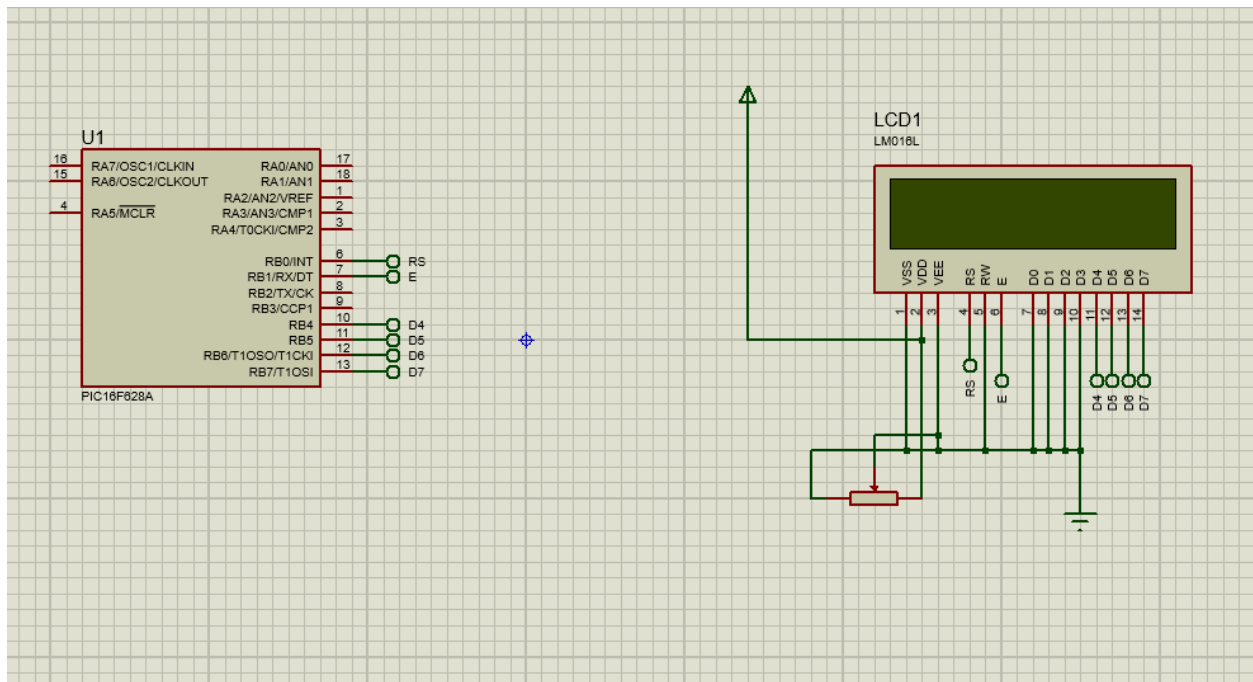
    }

    // Move inward
    for(i = 16; i > 0; i--) {
        Lcd_Cmd(_LCD_CLEAR);
        Lcd_Out(2,i,txt1);
        Move_Delay();
    }

    for(i = 0; i < 1; i++) {
        Lcd_Cmd(_LCD_CLEAR);
        Lcd_Out(1,i,txt1);
        Move_Delay();
    }
}
}

```

Circuit



Observations

