

compiler directives

```
#include <C8051_SDCC.h>
```

```
#include <stdio.h>
```

function prototypes

```
void Port_Init (void);
```

```
void Set_Outputs (void);
```

```
int Slide_Switch_Status (void);
```

```
int Pushbutton1_Status (void);
```

```
int Pushbutton2_Status (void);
```

```
void Status_Report (void);
```

declare global variables

```
sbit LED0, BILED0, BILED1, BUZZER, SS, PB1, PB2.
```

main function

```
declare local variables (NONE)
```

```
initialization functions.
```

```
Sys_Init ();
```

```
putchar ( ' ' );
```

```
Port_Init ();
```

Begin infinite loop

execute Set\_Outputs (void) function to read sbit inputs and set sbit outputs.

End infinite loop

End main function.

Functions

void Port\_Init (void) Initialize the input/output device.

int Slide\_Switch\_Status (void) return 1 if slide switch is ON.

int Pushbutton1\_Status (void) return 1 if button 1 is pushed, 0 if not.

int Pushbutton2\_Status (void) return 1 if button 2 is pushed, 0 if not.

void Status\_Report (void)

Report the status (ON/OFF) of the inputs SS, PB1, PB2

void Set\_Outputs

Report the status of input using Status\_Report.

If slide switch is OFF, turn off all outputs.

If slide switch is ON, turn on LED

If both buttons are pushed, turn on buzzer.

If only PB2 is pushed, turn the BILED to green.

If only PB1 is pushed, turn the BILED to red.