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LITEC

Section 3

Group Member 1 Pseudocode

compiler directives

```
#include <c8051_SDCC.h>
```

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

declare global variables

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

function prototypes

```
void Port_Init(void)
```

```
void Set_Outputs(void)
```

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)
```

```
    Set SFRs P2, P3, P2MDOUT & P3MDOUT so P2.0, P3.0 & P3.1 are inputs,  
    P3.3, P3.4, P3.6 & P3.7 are outputs
```

```
End Port_Init
```

```
void Set_Outputs(void)
```

```
    If SS is off then
```

```
        LED0 is on, BILED0 is off, BILED1 is off, BUZZER is off
```

```
        Print "Slide Switch is OFF"
```

```
    Else (this means SS is on)
```

```
        Print "Slide Switch is ON and LED0 is off"
```

```
        If (PB1 is pushed and PB2 is pushed) then
```

```
            BILED0 is off, BILED1 is off, BUZZER is on
```

```
            Print "Pushbutton 1 and 2 ACTIVATED"
```

```
        Else if (PB1 is pushed and PB2 is released) then
```

```
            BILED0 is Green, BILED1 is off, BUZZER is off
```

```
            Print "Pushbutton 1 ACTIVATED"
```

```
        Else if (PB1 is released and PB2 is pushed) then
```

```
            BILED0 is off, BILED1 is Red, BUZZER is off
```

```
            Print "Pushbutton 2 ACTIVATED"
```

```
        Else BILED0 is off, BILED1 is off, BUZZER is off
```

```
End Set_Outputs
```