**Date Submitted: 9/19/19**

**Task 00: Execute provided code**

**Youtube Link: N/A**

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**Task 01:**

Youtube Link: https://www.youtube.com/watch?v=OQw5zRJ0xQA

**Modified Schematic (if applicable): N/A**

Delay Calculation:

(1/40MHz) \* 3x = .5seconds (3x because in SysCltDelay every count takes 3 clock cycles)

X = 6,666,667

**Modified Code:**

**int main(void)**

**{**

**SysCtlClockSet(SYSCTL\_SYSDIV\_5|SYSCTL\_USE\_PLL|SYSCTL\_XTAL\_16MHZ|SYSCTL\_OSC\_MAIN);**

**//set clock to 40MHz**

**SysCtlPeripheralEnable(SYSCTL\_PERIPH\_GPIOF);**

**GPIOPinTypeGPIOOutput(GPIO\_PORTF\_BASE, GPIO\_PIN\_1|GPIO\_PIN\_2|GPIO\_PIN\_3);**

**while(1)**

**{**

**GPIOPinWrite(GPIO\_PORTF\_BASE, GPIO\_PIN\_1|GPIO\_PIN\_2|GPIO\_PIN\_3, ui8PinData);**

**SysCtlDelay(6666667); //500ms delay**

**GPIOPinWrite(GPIO\_PORTF\_BASE, GPIO\_PIN\_1|GPIO\_PIN\_2|GPIO\_PIN\_3, 0x00);**

**SysCtlDelay(6666667); //500ms delay**

**if(ui8PinData==8)**

**{**

**ui8PinData=2;**

**}**

**else**

**{**

**ui8PinData=ui8PinData\*2;**

**}**

**}**

**}**

**------------------------------------------------------------------------------------**

**Task 02:**

Youtube Link: https://www.youtube.com/watch?v=agF6\_JSienU

**Modified Schematic (if applicable): N/A**

**Modified Code:**

**int main(void)**

**{**

**SysCtlClockSet(SYSCTL\_SYSDIV\_5|SYSCTL\_USE\_PLL|SYSCTL\_XTAL\_16MHZ|SYSCTL\_OSC\_MAIN);**

**//set clock to 40MHz**

**SysCtlPeripheralEnable(SYSCTL\_PERIPH\_GPIOF);**

**GPIOPinTypeGPIOOutput(GPIO\_PORTF\_BASE, GPIO\_PIN\_1|GPIO\_PIN\_2|GPIO\_PIN\_3);**

**GPIOPinWrite(GPIO\_PORTF\_BASE, GPIO\_PIN\_1|GPIO\_PIN\_2|GPIO\_PIN\_3, 0x00); //All off**

**SysCtlDelay(6666667); //500ms delay**

**while(1)**

**{**

**ui8PinData = 2; //Red**

**GPIOPinWrite(GPIO\_PORTF\_BASE, GPIO\_PIN\_1|GPIO\_PIN\_2|GPIO\_PIN\_3, ui8PinData);**

**SysCtlDelay(6666667); //500ms delay**

**ui8PinData = 8; //Green**

**GPIOPinWrite(GPIO\_PORTF\_BASE, GPIO\_PIN\_1|GPIO\_PIN\_2|GPIO\_PIN\_3, ui8PinData);**

**SysCtlDelay(6666667); //500ms delay**

**ui8PinData = 4; //Blue**

**GPIOPinWrite(GPIO\_PORTF\_BASE, GPIO\_PIN\_1|GPIO\_PIN\_2|GPIO\_PIN\_3, ui8PinData);**

**SysCtlDelay(6666667); //500ms delay**

**ui8PinData = 10; //RG**

**GPIOPinWrite(GPIO\_PORTF\_BASE, GPIO\_PIN\_1|GPIO\_PIN\_2|GPIO\_PIN\_3, ui8PinData);**

**SysCtlDelay(6666667); //500ms delay**

**ui8PinData = 6; //RB**

**GPIOPinWrite(GPIO\_PORTF\_BASE, GPIO\_PIN\_1|GPIO\_PIN\_2|GPIO\_PIN\_3, ui8PinData);**

**SysCtlDelay(6666667); //500ms delay**

**ui8PinData = 12; //GB**

**GPIOPinWrite(GPIO\_PORTF\_BASE, GPIO\_PIN\_1|GPIO\_PIN\_2|GPIO\_PIN\_3, ui8PinData);**

**SysCtlDelay(6666667); //500ms delay**

**ui8PinData = 14; //RGB**

**GPIOPinWrite(GPIO\_PORTF\_BASE, GPIO\_PIN\_1|GPIO\_PIN\_2|GPIO\_PIN\_3, ui8PinData);**

**SysCtlDelay(6666667); //500ms delay**

**}**

**}**

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