

Tug of war reflection log:

I start off by creating my addresses linking where all my ports are so that the program knows where to take its data from, I declared 2 variables that represent player 1 and player 2 firstly I have when player 1 is red redbutton get state will check if the button is pressed correctly and everytime the button is pressed it will add a score to the player 1 and the same happens for player 2 I have a for loop of for(int i = 0; i<5; i++) the loop checks whether the condition is true if i is less than 5, the loop runs otherwise, it terminates. My if statement occurs when a player reaches the max of 10 and then it will print out a player has won, if not then the application runs until someone hits that target score of 10

```
package gettingstarted2;
```

```
import com.phidget22.DigitalInput;
import com.phidget22.DigitalOutput;
```

```
public class tugofwar {
    public static void main(String[] args) throws Exception{
```

```
        //Create
        DigitalInput redButton = new DigitalInput();
        DigitalOutput redLED = new DigitalOutput();
        DigitalInput greenButton = new DigitalInput();
        DigitalOutput greenLED = new DigitalOutput();
```

```
        //Address
        redButton.setHubPort(0);
        redButton.setIsHubPortDevice(true);
        redLED.setHubPort(1);
        redLED.setIsHubPortDevice(true);
        greenButton.setHubPort(5);
        greenButton.setIsHubPortDevice(true);
        greenLED.setHubPort(4);
        greenLED.setIsHubPortDevice(true);
```

```
        //Open
        redButton.open(1000);
        redLED.open(1000);
        greenButton.open(1000);
        greenLED.open(1000);
```

```
        int player1 = 0;
        int player2 = 0;
```

```

System.out.println("Player 1 is Red");
System.out.println("Player 2 is Green");

while(player1 < 10 && player2 < 10)
{
    if(redButton.getState())
    {
        player1++;

        System.out.println("Player 1: " + player1);

        Thread.sleep(150);
    }

    if(greenButton.getState())
    {
        player2++;

        System.out.println("Player 2: " + player2);

        Thread.sleep(150);
    }
    Thread.sleep(100);
}

redLED.setState(true);
greenLED.setState(true);
Thread.sleep(1000);

redLED.setState(false);
greenLED.setState(false);
Thread.sleep(1000);

if(player1 == 10)
{
    System.out.print("Player 1 Wins!");

    for(int i = 0; i<5; i++)
    {
        redLED.setState(true);
        Thread.sleep(1000);
    }
}

```

```
        redLED.setState(false);
        Thread.sleep(1000);
    }
}

if (player2 == 10)
{
    System.out.print("Player 2 Wins!");

    for(int i = 0; i<5; i++)
    {
        greenLED.setState(true);
        Thread.sleep(1000);
        greenLED.setState(false);
        Thread.sleep(1000);
    }
}
}
```