File: D:\Autonomous\autonomous-includes\multiplexer.h

```
/*
* Include some necessary files
*/
#include "hitechnic-sensormux.h"
#include "lego-light.h"
#include "hitechnic-irseeker-v2.h"
#include "hitechnic-touchmux.h"
#include "hitechnic-gyro.h"

                                                        // CONSTANTS
const tMUXSensor irLeft = msensor_S2_1;                 // Left IR seeker address
const tMUXSensor irRight = msensor_S2_2;                // Right IR seeker address
const tMUXSensor lightSenseLeft   = msensor_S2_3;       // Left light sensor address
const tMUXSensor lightSenseRight  = msensor_S2_4;       // Right light sensor address
                                                        // SENSOR VALUES
int rawLightLeft;                                       // Left IR seeker value
int rawLightRight;                                      // Right IR seeker value
int irStrengthLeft;                                     // Left light sensor value
int irStrengthRight;                                    // Right light sensor value

int dummy;                                              // Dummy variable

/*
* Constantly update the variables with the sensor values
*/
task getSmux()
{
  LSsetActive(lightSenseLeft);                          // Turn the light sensors on to show that we're working
  LSsetActive(lightSenseRight);
  HTGYROstartCal(sGyro);
  writeDebugStreamLine("Multiplexer setup ready");      // Print a "ready" message

  while (true){
    rawLightLeft = LSvalRaw(lightSenseLeft);            // Set all the variables to the sensor readings
    rawLightRight = LSvalRaw(lightSenseRight);

    if(!HTIRS2readEnhanced(irLeft, dummy, irStrengthLeft)){     // If the function returns false:
      writeDebugStreamLine("Something's wrong with the IR");    // Let the operator know that something is wrong
    }
    if(!HTIRS2readEnhanced(irRight, dummy, irStrengthRight)){
      writeDebugStreamLine("Something's wrong with the IR");
    }
  }
}
```