#include <SendOnlySoftwareSerial.h>

#include <ArduinoInit.h>

void setup( )

{

configArduino ();

char side;

char turn = 'l';

if (sideDark())

side = 'b';

else

side = 'w';

unsigned int first;

unsigned int second;

bool test = true;

while (test)

{

first = readADC(4);

motors('1','A',100);

motors('2','B',100);

pause(200);//Change this to make it 45 degrees

motors('B','O',100);

pause(100);

second = readADC(4);

if (second<first)

{

test = false;

motors('1','B',100);

motors('2','A',100);

pause(200);//Change this to make it 45 degrees

motors('B','O',100);

pause(100);

}

}

motors('B', 'A', 100);

//Check if an if statement here will do anything

if (readADC(12)==0 && readADC(11) != 0)//Check if these numbers are the bumpers

{

turn = 'l';

motors('B','O',100);

pause(100);

motors('B', 'B', 100);

pause(50);

motors('1','B',100);//Make sure this makes it turn left

motors('2','A',100);

pause(200);//Check that this makes it turn 45 degrees

}

else

{

if (readADC(12)!=0 && readADC(11) == 0)//Check if these numbers are the bumpers

{

turn = 'r';

motors('B','O',100);

pause(100);

motors('B', 'B', 100);

pause(50);

motors('1','A',100);//Make sure this makes it turn right

motors('2','B',100);

pause(200);//Check that this makes it turn 45 degrees

}

else

{

if (readADC(12)==0 && readADC(11) == 0 && turn == 'r')//Check if these numbers are the bumpers

{

motors('B','O',100);

pause(100);

motors('B', 'B', 100);

pause(50);

motors('1','A',100);//Make sure this makes it turn right

motors('2','B',100);

pause(200);//Check that this makes it turn 45 degrees

}

else

{

if (readADC(12)==0 && readADC(11) == 0 && turn == 'l')//Check if these numbers are the bumpers

{

motors('B','O',100);

pause(100);

motors('B', 'B', 100);

pause(50);

motors('1','B',100);//Make sure this makes it turn right

motors('2','A',100);

pause(200);//Check that this makes it turn 45 degrees

}

}

}

}

pause(1000);

//Proceed forward for a few seconds

// put your setup code here, to run once:

}

bool sideDark()

{

unsigned int light = readADC(0);

if (light <35000)

{

return false;

}

return true;

}

void loop( )

{

/\*motors('B','A',100);

pause(1000);

motors('B','O',100);

pause(1000);

\*/

// put your main code here, to run repeatedly:

}