task usercontrol()

{

 // User control code here, inside the loop

 while (true)

 {

 int manualcontrol;

 /\*Code reading guide:

 1. vexRT means remote control

 2. Btn??Xmtr means partner remote

 /\*--------------------------------------------------------------------------------------------------------------------------------\*/

 /\* DR4B(1,0);

 wait1Msec(1000);

 float offsetLeft = SensorValue[leftDR4BPot];

 float offsetRight = SensorValue[rightDR4BPot];

 float wantedHeight = 0;

 float restHeight = 0;

 float coneHeight = 25; //needs to be set

 float stationaryGoalHeight = 500; //needs to be set

 float maxHeight = 950; //needs to be set

 float manualcontrol;

 DR4BTargetLeft = SensorValue[leftDR4BPot];

 DR4BTargetRight = SensorValue[rightDR4BPot];

 startTask(DR4BPID);

 int DR4BcontrolState = 0;

 \*/

/\*--------------------------------------------------------------------------------------------------------------------------------\*/

 while (true)

 {

 /\*NOTES:

 Main controller is Stacking and DR4B controls

 Partner is Drive and MOGO

 \*/

 /\*--------------------------------------------------------------------------------------------------------------------------------\*/

 //DR4B

 /\* if(vexRT(Btn7U) == 1)//DR4B moves up 1 cone height

 {

 wantedHeight = coneHeight;

 coneHeight = coneHeight + 1;

 }

 if(vexRT(Btn7D) == 1)//DR4B moves down 1 cone height

 {

 wantedHeight = coneHeight - 1;

 }

 else if(vexRT(Btn7L) == 1)//DR4B moves to stationary goal height

 {

 wantedHeight = stationaryGoalHeight;

 }

 else if(vexRT(Btn7R) == 1)//DR4B moves all the way down

 {

 wantedHeight = 0;

 }

 else if(vexRT(Btn5U) == 1)//Calculation of offset and wanted height making Target height

 {

 DR4BTargetLeft = wantedHeight + offsetLeft;

 DR4BTargetRight = wantedHeight + offsetRight;

 }

 if(vexRT(Btn8R) == 1)//Recalibrate offset for when Potentiometer malfunctions

 {

 offsetLeft = SensorValue(leftDR4BPot);

 offsetRight = SensorValue(rightDR4BPot);

 }

 \*/

 /\*--------------------------------------------------------------------------------------------------------------------------------\*/

 //DR4B Manualcontrol

 if(vexRT(Btn8L) == 1 && manualcontrol != 1)//Enable manual control

 {

 manualcontrol = 1;

 }

 if(vexRT(Btn8L) == 1 && manualcontrol == 1)//Disable manual control

 {

 manualcontrol = 0;

 }

 if(vexRT(Btn8U) == 1 && manualcontrol == 1)//Manual control DR4B moves up

 {

 motor[leftDR4B] = 90;

 motor[rightDR4B] = 90;

 }

 else if(vexRT(Btn8D) == 1 && manualcontrol == 1)//Manual control DR4B moves down

 {

 motor[leftDR4B] = -90;

 motor[rightDR4B] = -90;

 }

 else if(manualcontrol == 1 && (vexRT(Btn8D) == 0) && vexRT(Btn8U) == 0)

 {

 motor[leftDR4B] = 0;

 motor[rightDR4B] = 0;

 }

 /\*--------------------------------------------------------------------------------------------------------------------------------\*/

 //Stacking

 /\* if(vexRT(Btn6U) == 1)//Starts stacking process depending on arm encoder

 {

 stacking(1);

 }

 \*/

 /\*--------------------------------------------------------------------------------------------------------------------------------\*/

 // Drive

 rightDrive(vexRT(Ch2Xmtr2));//Right side drive responds to right joystick (PID code not used here)

 leftDrive(vexRT(Ch3Xmtr2));//Left side driving responds to left joystick (PID code not used here)

 /\*--------------------------------------------------------------------------------------------------------------------------------\*/

 //MOGO

 if(vexRT(Btn6UXmtr2) == 1)//MoGO lift moves up

 {

 moGo(1,0);

 }

 else if(vexRT(Btn6DXmtr2) == 1)//MoGo lift moves down

 {

 moGo(0,1);

 }

 else// else stay

 {

 moGo(0,0);

 }

 }

 }

 //UNAUTOMATED STACKING

 /\*--------------------------------------------------------------------------------------------------------------------------------\*/

 //Arm Control

 if(vexRT(Btn7UXmtr2) == 1)

 {

 armControl(0,1);

 }

 else if(vexRT(Btn7DXmtr2) == 1)

 {

 armControl(1,0);

 }

 else

 {

 armControl(0,0);

 }

 /\*--------------------------------------------------------------------------------------------------------------------------------\*/

 //Rollers

 if(vexRT(Btn7LXmtr2) == 1)

 {

 motor[claw] = 90;

 }

 else if(vexRT(Btn7RXmtr2) == 1)

 {

 motor[claw] = -90;

 }

 else

 {

 motor[claw] = 0;

 }

} /\*--------------------------------------------------------------------------------------------------------------------------------\*/