```
#include <GyroLib_4.0.h>
#include <kipr/botball.h>
//Lebot's Legacy
//How will this affect Leborn's Legacy??
//Adam, Michael, Harouna
int main()
{
    create_connect();

   /*int line_thresh;
    int range_thresh = 2000;
    int lm;
    int rm;
    int bump;*/
    int servo0 = 3;
    int servo1 = 0;
    int servo2 = 2;
    int claw_open = 2047;
    int claw_close = 0;  //
    int claw_rest = 800;

    //In start box:
    //servo0 = 0
    //servo1 = 0
    //servo2 = 800


//------------------------------------------------------------------------------ Lower Lebot's arm


void drive(int speed, int time)
    {
    create_drive_with_gyro_advanced(speed,time, 10, 0);
    }

void servo_speed(int pos, int speed) //higher speed is slower
{
  if (get_servo_position(servo0) < pos)
  {

      int i;
      for (i = get_servo_position(servo0); i < pos; ++i)
      {
        set_servo_position(servo0, i);
        set_servo_position(servo1, i);
        msleep(speed);
      }
```

```
  }
  if (get_servo_position(servo0) > pos)
  {

   int i;
      for (i = get_servo_position(servo0); i > pos; --i)
      {
        set_servo_position(servo0, i);
        set_servo_position(servo1, i);
        msleep(speed);
      }
  }
}
//-----------------------------------------------------------------------------------------
void open_claw()
    {
    // claw open for start box
    set_servo_position(servo2,claw_open);
    msleep(500);
    }


void close_claw()
    {
    set_servo_position(servo2,claw_close);
    msleep(500);
    }

void rest_claw()
    {
    set_servo_position(servo2,claw_rest);
    msleep(500);
    }
void turn(int theta, int turnspeed)
{
    start_theta_tracker();
    create_turn_with_gyro_advanced(theta, turnspeed, 2 , 0, 0); // mess with pk
    stop_theta_tracker();
}


     declare_degrees(644);// 90 degrees is 644 kipr degrees

//
**********************************************************************************************Le
Goat
    enable_servos();
```

```
    servo_speed(0,1);
    rest_claw();

    while(digital(0) == 0) //wait for button
    {
    }

    msleep(1000);
    open_claw();        //open claw
    drive(100,800);     //drive forward
    close_claw();       //grab pom and cube
    servo_speed(800,1); //lift claw
    msleep(1000);
    turn(20,300);
          drive(-100,3000);   // aligns against pvc in start box

    drive(50, 1500);
    turn(-88, 100); // turns toward airlock

    drive(100,14000); // drives to the airlock




    return 0;
}
```