

```

#include <kipr/wombat.h>
int threshold = (2800 + 1060)/2;
int left = 200;
int right = 200;
//start arm at 1575

int main()
{
    //wait_for_light(0);

    shut_down_in(119);

    printf("Hello World\n");
    enable_servos();
    create_connect();

    //set arm down
    set_servo_position(0,1445);
    msleep(1000);

    // close claw
    set_servo_position(3,300);
    msleep(1000);

    //drive to cube pt. 1
    // go to the the balck tape line to get centered
    while ( (get_create_lcliff_amt() > threshold) || (get_create_rcliff_amt() > threshold) )
    {
        if (get_create_lcliff_amt() < threshold )
        {
            left= 0;

        }

        if (get_create_rcliff_amt() < threshold )
        {
            right = 0;
        }

        create_drive_direct(left, right);
    }

    printf("lined Up");

```

```
create_stop();  
msleep(000);
```

```
//drive forward  
create_drive_direct(300,300);  
msleep(800);
```

```
create_stop();  
msleep(1000);
```

```
//turn slightly  
create_drive_direct(300,0);  
msleep(350);
```

```
create_stop();  
msleep(1000);
```

```
//set to first cube height  
set_servo_position(0,950);  
msleep(1000);
```

```
set_servo_position(3,900);  
msleep(2000);
```

```
// drive to cube pt. 2  
while (get_create_rbump() ==0 && get_create_lbump() ==0)  
{  
    create_drive_direct(200,200);  
}
```

```
create_stop();  
msleep(1);
```

```
//set to first cube height  
set_servo_position(3,900);  
msleep(2000);
```

```
create_stop();  
msleep(1000);
```

```
//grab cube  
set_servo_position(3,100);  
msleep(1);
```

```
create_stop();  
msleep(1000);
```

```
set_servo_position(0,0);  
msleep(1000);
```

```
//backup  
create_drive_direct(-200,-200);  
msleep(1500);
```

```
create_stop();  
msleep(1000);
```

```
//turn  
create_drive_direct(500,0);  
msleep(1400);
```

```
create_stop();  
msleep(1000);
```

```
//lower arm  
set_servo_position(0,1330);  
msleep(1000);
```

```
//release cube  
set_servo_position(3,830);  
msleep(1000);
```

```
ao();  
msleep(1000);
```

```
//2nd cube raise to height  
set_servo_position(0,249);  
msleep(1000);
```

```
//open  
set_servo_position(3,1650);  
msleep(1000);
```

```
ao();  
msleep(100);
```

```
//turn  
create_drive_direct(0,500);
```

```
msleep(1450);

create_drive_direct(300,300);
msleep(1000);

//drive to 2nd cube until bumped
while (get_create_rbump() ==0 && get_create_lbump() ==0)
{
    create_drive_direct(200,200);
}

create_stop();
msleep(1);

// grab 2nd cube
set_servo_position(3,100);
msleep(1000);

//backup
create_drive_direct(-200,-200);
msleep(1500);

//turn
create_drive_direct(300,0);
msleep(2700);

create_drive_direct(300,300);
msleep(500);

//lower arm
set_servo_position(0,1330);
msleep(1000);

//release cube
set_servo_position(3,830);
msleep(1000);

ao();
msleep(1000);

create_disconnect();
disable_servos();
return 0;
}
```