

## T Robot code

```
#include <kipr/wombat.h>
void RT(float degree);
void LT(float degree);
void drive(int distance);
void drivefast(int distance);

void servo(int port, int position, int speed){

    int servo_position = get_servo_position(port);

    while(servo_position != position){
        if(servo_position > position){
            servo_position -=1;
        }
        if(servo_position < position){
            servo_position +=1;
        }
        set_servo_position(port,servo_position);
        msleep(speed);
    }
    set_servo_position(port,servo_position);
    msleep(50);
}

int main()
{
    enable_servos(1); //begining start up wave.
    servo(1,900,5);
    servo(1,1420,5);
    disable_servo(1);

    drivefast(3500); //Go to middle of table.
    RT(90);
    drivefast(7000);
    motor(2,0);
    motor(1,0);
    msleep(500);

    enable_servos(1); // Rase servo arm and face cups.
    servo(1,900,5);
    disable_servos(1);
}
```

```
LT(90);  
motor(2,0);  
motor(1,0);  
msleep(500);
```

```
enable_servos(2); // open, close, open claw arm.  
servo(2,1000,1);  
servo(2,500,1);  
servo(2,1600,1);  
disable_servos(2);
```

```
enable_servos(2); //Open claw to get ready to pick up cup  
servo(2,1250,1);  
disable_servos(2);
```

```
    drive(320); // drive forward a little  
motor(2,0);  
motor(1,0);  
msleep(500);
```

```
enable_servos(1); //bring arm down over the cup  
servo(1,1240,1);  
disable_servos(1);
```

```
enable_servos(2); // close claw to grab cup THIS ONE IS IMPORTANT !!!!!  
servo(2,1500,1);  
disable_servos(2);
```

```
enable_servos(1); // pick up cup into the air  
servo(1,600,1);  
disable_servos(1);
```

```
LT(90);          //Turn left drive forward  
drive(2000);  
motor(2,0);  
motor(1,0);  
msleep(500);
```

```
LT(90);          //turn left to face drop off point  
motor(2,0);  
motor(1,0);  
msleep(500);
```

```
drive(200);      //drive forward
```

```

    motor(2,0);
    motor(1,0);
    msleep(500);
    enable_servos(1);    //lower arm down
    servo(1,1240,1);
    disable_servos(1);

    enable_servos(2);    //open claw to drop cup
    servo(2,1250,1);
    disable_servos(2);

    enable_servos(1);    //arm raises up out of the way.
    servo(1,600,1);
    disable_servos(1);


    //motor(2,0);    // stop at end.
    //motor(1,0);
    //msleep(500);
    return 0;
}

// Not Part Of Code

!!!!!!!!!!!!!!!
void RT(float degree)
{
    cmpr(2);
    while (gmpr(2)<degree*14.44)
    {
        motor(2,50);
        motor(1,-50);

    }
}

void LT(float degree)
{
    cmpr(1);
    while (gmpr(1)<degree*14.44)
    {
        motor(2,-50);
        motor(1,50);

    }
}

```

