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// Autonomous routine for AntiCap Bot
void autonomous( void ) {
    //1 Drive backward to push ball to MultiBot
    LeftMotor1.rotateFor(-1.273, vex::rotationUnits::rev, 80,
        vex::velocityUnits::pct, false);
    LeftMotor2.rotateFor(-1.273, vex::rotationUnits::rev, 80,
        vex::velocityUnits::pct, false);
    LeftMotor3.rotateFor(-1.273, vex::rotationUnits::rev, 80,
        vex::velocityUnits::pct, false);
    RightMotor1.rotateFor(-1.273, vex::rotationUnits::rev, 80,
        vex::velocityUnits::pct, false);
    RightMotor2.rotateFor(-1.273, vex::rotationUnits::rev, 80,
        vex::velocityUnits::pct, false);
    RightMotor3.rotateFor(-1.273, vex::rotationUnits::rev, 80,
        vex::velocityUnits::pct, false);
    vex::task::sleep(1000);
    //2 Drive forward to line up for cap
    LeftMotor1.rotateFor(1450, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    LeftMotor2.rotateFor(1450, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    LeftMotor3.rotateFor(1450, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    RightMotor1.rotateFor(1450, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    RightMotor2.rotateFor(1450, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    RightMotor3.rotateFor(1450, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    vex::task::sleep(2000);
    //3 Turn to face cap
    LeftMotor1.rotateFor(-295, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    LeftMotor2.rotateFor(-295, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    LeftMotor3.rotateFor(-295, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    RightMotor1.rotateFor(295, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    RightMotor2.rotateFor(295, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    RightMotor3.rotateFor(295, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    vex::task::sleep(1000);
    //4 Drive to hit cap
    LeftMotor1.spin(vex::directionType::rev, 50,
        vex::velocityUnits::pct); //(Axis3+Axis1)
    LeftMotor2.spin(vex::directionType::rev, 50,
        vex::velocityUnits::pct); //(Axis3+Axis1)
    LeftMotor3.spin(vex::directionType::rev, 50,
        vex::velocityUnits::pct); //(Axis3+Axis1)

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    RightMotor1.spin(vex::directionType::rev, 50,
        vex::velocityUnits::pct); //(Axis3-Axis1)
    RightMotor2.spin(vex::directionType::rev, 50,
        vex::velocityUnits::pct); //(Axis3-Axis1)
    RightMotor3.spin(vex::directionType::rev, 50,
        vex::velocityUnits::pct); //(Axis3-Axis1)
    vex::task::sleep(500);
    //4.33 Stop driving
    LeftMotor1.spin(vex::directionType::fwd, 0,
        vex::velocityUnits::pct); //(Axis3+Axis1)
    LeftMotor2.spin(vex::directionType::fwd, 0,
        vex::velocityUnits::pct); //(Axis3+Axis1)
    LeftMotor3.spin(vex::directionType::fwd, 0,
        vex::velocityUnits::pct); //(Axis3+Axis1)
    RightMotor1.spin(vex::directionType::fwd, 0,
        vex::velocityUnits::pct); //(Axis3-Axis1)
    RightMotor2.spin(vex::directionType::fwd, 0,
        vex::velocityUnits::pct); //(Axis3-Axis1)
    RightMotor3.spin(vex::directionType::fwd, 0,
        vex::velocityUnits::pct); //(Axis3-Axis1)
    vex::task::sleep(1000);
    //4.66 Turn to face next cap
    LeftMotor1.rotateFor(10, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    LeftMotor2.rotateFor(10, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    LeftMotor3.rotateFor(10, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    RightMotor1.rotateFor(-10, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    RightMotor2.rotateFor(-10, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    RightMotor3.rotateFor(-10, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    vex::task::sleep(1000);

    //5 Drive forward to cap
    LeftMotor1.rotateFor(1440, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    LeftMotor2.rotateFor(1440, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    LeftMotor3.rotateFor(1440, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    RightMotor1.rotateFor(1440, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    RightMotor2.rotateFor(1440, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    RightMotor3.rotateFor(1440, vex::rotationUnits::deg, 80,
        vex::velocityUnits::pct, false);
    vex::task::sleep(2000);
    //6 Move arm to flip cap

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ApexMotor1.startRotateTo(-275,vex::rotationUnits::deg, 100,
    vex::velocityUnits::pct);//up
vex::task::sleep(500);
ApexMotor1.startRotateTo(-100,vex::rotationUnits::deg, 100,
    vex::velocityUnits::pct);//down
vex::task::sleep(300);
ApexMotor1.startRotateTo(0, vex::rotationUnits::deg, 25,
    vex::velocityUnits::pct);//down slower
vex::task::sleep(300);
//7 Turn to face wall
LeftMotor1.rotateFor(-170, vex::rotationUnits::deg, 80,
    vex::velocityUnits::pct, false);
LeftMotor2.rotateFor(-170, vex::rotationUnits::deg, 80,
    vex::velocityUnits::pct, false);
LeftMotor3.rotateFor(-170, vex::rotationUnits::deg, 80,
    vex::velocityUnits::pct, false);
RightMotor1.rotateFor(170, vex::rotationUnits::deg, 80,
    vex::velocityUnits::pct, false);
RightMotor2.rotateFor(170, vex::rotationUnits::deg, 80,
    vex::velocityUnits::pct, false);
RightMotor3.rotateFor(170, vex::rotationUnits::deg, 80,
    vex::velocityUnits::pct, false);
vex::task::sleep(1000);
//8 Drive to line up on wall
LeftMotor1.rotateFor(710, vex::rotationUnits::deg, 100,
    vex::velocityUnits::pct, false);
LeftMotor2.rotateFor(710, vex::rotationUnits::deg, 100,
    vex::velocityUnits::pct, false);
LeftMotor3.rotateFor(710, vex::rotationUnits::deg, 100,
    vex::velocityUnits::pct, false);
RightMotor1.rotateFor(710, vex::rotationUnits::deg, 100,
    vex::velocityUnits::pct, false);
RightMotor2.rotateFor(710, vex::rotationUnits::deg, 100,
    vex::velocityUnits::pct, false);
RightMotor3.rotateFor(710, vex::rotationUnits::deg, 100,
    vex::velocityUnits::pct, false);
vex::task::sleep(1000);
//9 Turn a little
LeftMotor1.rotateFor(-710, vex::rotationUnits::deg, 100,
    vex::velocityUnits::pct, false);
LeftMotor2.rotateFor(-710, vex::rotationUnits::deg, 100,
    vex::velocityUnits::pct, false);
LeftMotor3.rotateFor(-710, vex::rotationUnits::deg, 100,
    vex::velocityUnits::pct, false);
RightMotor1.rotateFor(-710, vex::rotationUnits::deg, 100,
    vex::velocityUnits::pct, false);
RightMotor2.rotateFor(-710, vex::rotationUnits::deg, 100,
    vex::velocityUnits::pct, false);
RightMotor3.rotateFor(-710, vex::rotationUnits::deg, 100,
    vex::velocityUnits::pct, false);
vex::task::sleep(1000);

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//10 Turn to face platform
LeftMotor1.rotateFor(443, vex::rotationUnits::deg, 80,
    vex::velocityUnits::pct, false);
LeftMotor2.rotateFor(443, vex::rotationUnits::deg, 80,
    vex::velocityUnits::pct, false);
LeftMotor3.rotateFor(443, vex::rotationUnits::deg, 80,
    vex::velocityUnits::pct, false);
RightMotor1.rotateFor(-443, vex::rotationUnits::deg, 80,
    vex::velocityUnits::pct, false);
RightMotor2.rotateFor(-443, vex::rotationUnits::deg, 80,
    vex::velocityUnits::pct, false);
RightMotor3.rotateFor(-443, vex::rotationUnits::deg, 80,
    vex::velocityUnits::pct, false);
vex::task::sleep(1000);
//10.5 Drive to platform
LeftMotor1.spin(vex::directionType::fwd, 100,
    vex::velocityUnits::pct); //(Axis3+Axis1)
LeftMotor2.spin(vex::directionType::fwd, 100,
    vex::velocityUnits::pct); //(Axis3+Axis1)
LeftMotor3.spin(vex::directionType::fwd, 100,
    vex::velocityUnits::pct); //(Axis3+Axis1)
RightMotor1.spin(vex::directionType::fwd, 100,
    vex::velocityUnits::pct); //(Axis3-Axis1)
RightMotor2.spin(vex::directionType::fwd, 100,
    vex::velocityUnits::pct); //(Axis3-Axis1)
RightMotor3.spin(vex::directionType::fwd, 100,
    vex::velocityUnits::pct); //(Axis3-Axis1)
vex::task::sleep(500);

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//11 Stop driving
LeftMotor1.spin(vex::directionType::fwd, 0,
    vex::velocityUnits::pct); //(Axis3+Axis1)
LeftMotor2.spin(vex::directionType::fwd, 0,
    vex::velocityUnits::pct); //(Axis3+Axis1)
LeftMotor3.spin(vex::directionType::fwd, 0,
    vex::velocityUnits::pct); //(Axis3+Axis1)
RightMotor1.spin(vex::directionType::fwd, 0,
    vex::velocityUnits::pct); //(Axis3-Axis1)
RightMotor2.spin(vex::directionType::fwd, 0,
    vex::velocityUnits::pct); //(Axis3-Axis1)
RightMotor3.spin(vex::directionType::fwd, 0,
    vex::velocityUnits::pct); //(Axis3-Axis1)
vex::task::sleep(23000);

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//11.5 Drive up platform
LeftMotor1.spin(vex::directionType::rev, 100,
    vex::velocityUnits::pct); //(Axis3+Axis1)
LeftMotor2.spin(vex::directionType::rev, 100,
    vex::velocityUnits::pct); //(Axis3+Axis1)

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LeftMotor3.spin(vex::directionType::rev, 100,  
    vex::velocityUnits::pct); //(Axis3+Axis1)  
RightMotor1.spin(vex::directionType::rev, 100,  
    vex::velocityUnits::pct); //(Axis3-Axis1)  
RightMotor2.spin(vex::directionType::rev, 100,  
    vex::velocityUnits::pct); //(Axis3-Axis1)  
RightMotor3.spin(vex::directionType::rev, 100,  
    vex::velocityUnits::pct); //(Axis3-Axis1)  
vex::task::sleep(2000);
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//12 Stop driving
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LeftMotor1.spin(vex::directionType::fwd, 0,  
    vex::velocityUnits::pct); //(Axis3+Axis1)  
LeftMotor2.spin(vex::directionType::fwd, 0,  
    vex::velocityUnits::pct); //(Axis3+Axis1)  
LeftMotor3.spin(vex::directionType::fwd, 0,  
    vex::velocityUnits::pct); //(Axis3+Axis1)  
RightMotor1.spin(vex::directionType::fwd, 0,  
    vex::velocityUnits::pct); //(Axis3-Axis1)  
RightMotor2.spin(vex::directionType::fwd, 0,  
    vex::velocityUnits::pct); //(Axis3-Axis1)  
RightMotor3.spin(vex::directionType::fwd, 0,  
    vex::velocityUnits::pct); //(Axis3-Axis1)  
vex::task::sleep(23000);
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}
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