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def main():
    #initializing the velocity of drivetrain, motors, and also setting heading
    drivetrain.set_drive_velocity(100, PERCENT)
    drivetrain.set_turn_velocity(100, PERCENT)
    drivetrain.set_heading(0, DEGREES)
    intake_motor_group.set_velocity(100, PERCENT)
    arm_motor_group.set_velocity(100, PERCENT)

    #getting first green block and putting it in the box
    intake_motor_group.spin(FORWARD)
    drivetrain.drive_for(FORWARD, 200, MM)
    if intake_bumper.pressing():
        intake_motor_group.stop()
    arm_motor_group.spin_to_position(330, DEGREES, wait=False)
    drivetrain.turn_to_heading(236, DEGREES)
    monitor_sensor("front_distance.object_distance_mm")
    drivetrain.drive(FORWARD)
    while front_distance.object_distance(MM) > 20:
        wait(5, MSEC)
    drivetrain.stop()
    intake_motor_group.spin_for(REVERSE, 360, DEGREES)

    #Getting second green block and putting it in the box
    drivetrain.drive(REVERSE)
    while front_distance.object_distance(MM) < 36:
        wait(5, MSEC)
    drivetrain.stop()
    drivetrain.turn_to_heading(20, DEGREES)
    arm_motor_group.spin_to_position(0, DEGREES)
    drivetrain.drive_for(FORWARD, 70, MM)
    intake_motor_group.spin(FORWARD)
    intake_bumper.pressing()
    intake_motor_group.stop()
    arm_motor_group.spin_to_position(330, DEGREES, wait=False)
    drivetrain.turn_to_heading(232, DEGREES)
    drivetrain.drive(FORWARD)
    while front_distance.object_distance(MM) > 20:
        wait(5, MSEC)
    drivetrain.stop()
    intake_motor_group.spin_for(REVERSE, 360, DEGREES)
    #Get the third cube and put it in the box
    drivetrain.drive(REVERSE)
    while front_distance.object_distance(MM) < 14:
        wait(5, MSEC)
    drivetrain.stop()
    drivetrain.turn_to_heading(20, DEGREES)
    arm_motor_group.spin_to_position(0, DEGREES)

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drivetrain.drive_for(FORWARD, 220, MM)
intake_motor_group.spin(FORWARD)
if intake_bumper.pressing():
    intake_motor_group.stop()
arm_motor_group.spin_to_position(330, DEGREES, wait=False)
drivetrain.turn_to_heading(220, DEGREES)
drivetrain.drive(FORWARD)
while front_distance.object_distance(MM) > 25:
    wait(5, MSEC)
drivetrain.stop()
intake_motor_group.spin_for(REVERSE, 360, DEGREES)

#Get the 4th green block and put it in the box
drivetrain.drive(REVERSE)
while front_distance.object_distance(MM) < 18:
    wait(5, MSEC)
drivetrain.stop()
drivetrain.turn_to_heading(20, DEGREES)
arm_motor_group.spin_to_position(0, DEGREES)

#I got 300 because the last time it was less and now I have a greater distance
drivetrain.drive_for(FORWARD, 300, MM)
drivetrain.turn_to_heading(0, DEGREES)
drivetrain.drive_for(FORWARD, 200, MM)
intake_motor_group.spin(FORWARD)
if intake_bumper.pressing():
    intake_motor_group.stop()
arm_motor_group.spin_to_position(330, DEGREES, wait=False)
drivetrain.turn_to_heading(205, DEGREES)
drivetrain.drive(FORWARD)
while front_distance.object_distance(MM) > 25:
    wait(5, MSEC)
drivetrain.stop()
intake_motor_group.spin_for(REVERSE, 360, DEGREES)

#get the first red block and put it in a box
drivetrain.drive_for(REVERSE, 150, MM)
drivetrain.turn_to_heading(90, DEGREES)
arm_motor_group.spin_to_position(90, DEGREES)
intake_motor_group.spin(FORWARD)
if intake_bumper.pressing():
    intake_motor_group.stop()
drivetrain.drive_for(FORWARD, 500, MM)
arm_motor_group.spin_for(FORWARD, 90, DEGREES)
drivetrain.drive_for(REVERSE, 550, MM)
drivetrain.turn_to_heading(0, DEGREES)
arm_motor_group.spin_to_position(300, DEGREES)

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drivetrain.drive_for(FORWARD, 955, MM)
drivetrain.turn_to_heading(-20, DEGREES)
intake_motor_group.spin_for(REVERSE, 360, DEGREES)
wait(1, SECONDS)
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#Geting the second red block and putting uniform bonus
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intake_motor_group.spin(FORWARD)
drivetrain.turn_to_heading(90, DEGREES)
arm_motor_group.spin_to_position(0, DEGREES)
if intake_bumper.pressing():
    intake_motor_group.stop()
drivetrain.drive_for(FORWARD, 250, MM)
arm_motor_group.spin_to_position(280, DEGREES)
drivetrain.turn_to_heading(-45, DEGREES)
drivetrain.drive_for(FORWARD, 140, MM)
intake_motor_group.spin_for(REVERSE, 360, DEGREES)
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# VR threads - Do not delete
vr_thread(main)
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