

```

1 package org.firstinspires.ftc.teamcode;
2 import com.qualcomm.robotcore.eventloop.opmode.LinearOpMode
  ;
3 import com.qualcomm.robotcore.eventloop.opmode.TeleOp;
4 import com.qualcomm.robotcore.hardware.DcMotor;
5 import com.shprobotics.pestocore.drivebases.
  MecanumController;
6 import com.shprobotics.pestocore.drivebases.MecanumTracker;
7 import com.shprobotics.pestocore.drivebases.
  TeleOpController;
8 import com.shprobotics.pestocore.geometries.Vector2D;
9
10 @TeleOp
11 public class test extends LinearOpMode {
12
13     @Override
14     public void runOpMode() {
15         MecanumController mecanumController =
16         PestoFTCConfig.getMecanumController(hardwareMap);
17         MecanumTracker mecanumTracker = PestoFTCConfig.
18         getTracker(hardwareMap);
19         TeleOpController teleOpController = PestoFTCConfig.
20         getTeleOpController(mecanumController, mecanumTracker,
21         hardwareMap);
22
23         DcMotor viperslide = hardwareMap.get(DcMotor.class
24         , "ViperSlide");
25         DcMotor wormgear = hardwareMap.get(DcMotor.class, "
26         WormGear");
27
28         waitForStart();
29
30         while (opModeIsActive()) {
31             mecanumTracker.updateOdometry();
32             Vector2D currentPosition = mecanumTracker.
33             getCurrentPosition();
34             double heading = mecanumTracker.
35             getCurrentHeading();
36
37             teleOpController.updateSpeed(gamepad1);
38
39             teleOpController.driveFieldCentric(-gamepad1.
40             left_stick_y, gamepad1.left_stick_x, gamepad1.right_stick_x

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32 );
33
34
35     telemetry.addData("x", currentPosition.getX());
36     telemetry.addData("y", currentPosition.getY());
37     telemetry.addData("rotation", heading);
38     telemetry.update();
39
40
41     if (gamepad1.b) {
42         mecanumTracker.reset();
43         teleOpController.resetIMU();
44     }
45
46     viperslide.setPower(gamepad1.right_stick_y);
47     wormgear.setPower(gamepad1.right_trigger);
48
49     //arm speed constraints
50     if (gamepad1.right_stick_y > 0.5); {
51         viperslide.setPower(0.5);
52
53     }
54     //if gamepad1.right_stick_y is between 10% and
55     50%)
56     if (gamepad1.right_stick_y > 0.1 && gamepad1.
57     right_stick_y < 0.5); {
58         viperslide.setPower(0.3);
59
60     }
61     if (gamepad1.right_stick_y < -0.1 && gamepad1.
62     right_stick_y > -0.5); {
63         viperslide.setPower(-0.3);
64     }
65 }
```