Title: Flash Dragon

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Team number: 67890A

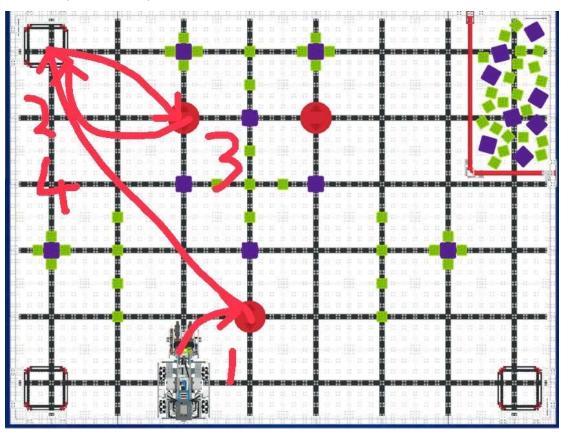
Location: Taiwan

We got to know that 67890B team get 66 points in VR because they put 2 green blocks into every basket and partial parking. So, only two ways to get higher points. First, we need to get 2 full level credit. Secondly, we need to get full parking credit. So we planed:

- 1. To get two red blocks, putting into third basket.
- 2. To get every two purple blocks, putting into second and first baskets.
- 3. Rush into parking area as fast as robot can.

```
def when_started1():
                                                             Start from B point.
   arm motor group.set position(0, DEGREES)
   drivetrain.set_drive_velocity(100, PERCENT)
   drivetrain.set_turn_velocity(100, PERCENT)
   intake motor group.spin(FORWARD)
   drivetrain.drive_for(FORWARD, 50, MM)
   drivetrain.turn for(RIGHT, 45, DEGREES)
   drivetrain.drive for(FORWARD, 100, MM)
                                                             Get 1st red block.
   drivetrain.turn_for(LEFT, 70, DEGREES)
   drivetrain.drive(FORWARD)
   wait(2.5, SECONDS)
                           We don's want to measure distance so we use seconds.
   drivetrain.stop()
   arm_motor_group.spin_to_position(330, DEGREES)
   drivetrain.drive for(FORWARD, 300, MM)
   drivetrain.turn for(LEFT, 5, DEGREES)
   intake_motor_group.spin(REVERSE) Put the 1<sup>st</sup> red block into 3<sup>rd</sup> basket.
   wait(1, SECONDS)
   drivetrain.turn for(RIGHT, 5, DEGREES)
   drivetrain.drive for(REVERSE, 100, MM)
   arm_motor_group.spin_to_position(0, DEGREES)
   intake motor group.spin(FORWARD)
   drivetrain.turn for(RIGHT, 125, DEGREES)
                                                             Get 2<sup>nd</sup> red block.
   drivetrain.drive for(FORWARD, 150, MM)
```

drivetrain.drive\_for(REVERSE, 150, MM)
drivetrain.turn\_for(LEFT, 130, DEGREES)
arm\_motor\_group.spin\_to\_position(330, DEGREES)
drivetrain.drive\_for(FORWARD, 50, MM)
intake\_motor\_group.spin(REVERSE) Put the 2<sup>nd</sup> red block into 3<sup>rd</sup> basket.
wait(1, SECONDS)



drivetrain.drive\_for(REVERSE, 200, MM)
intake\_motor\_group.spin(FORWARD)
arm\_motor\_group.spin\_to\_position(0, DEGREES)
drivetrain.turn\_for(RIGHT, 150, DEGREES)
drivetrain.drive\_for(FORWARD, 750, MM)

Get 1<sup>st</sup> purple block and push 2<sup>nd</sup> block together.

drivetrain.turn\_for(RIGHT, 110, DEGREES)

arm\_motor\_group.spin\_to\_position(330, DEGREES)

drivetrain.drive\_for(FORWARD, 950, MM)

intake\_motor\_group.spin(REVERSE) Put the 1<sup>st</sup> purple block into 2<sup>nd</sup> basket.

wait(1, SECONDS)

drivetrain.drive\_for(REVERSE, 100, MM)

intake\_motor\_group.spin(FORWARD)

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arm_motor_group.spin_to_position(0, DEGREES)

drivetrain.turn_for(LEFT, 20, DEGREES)

drivetrain.turn_for(RIGHT, 20, DEGREES)

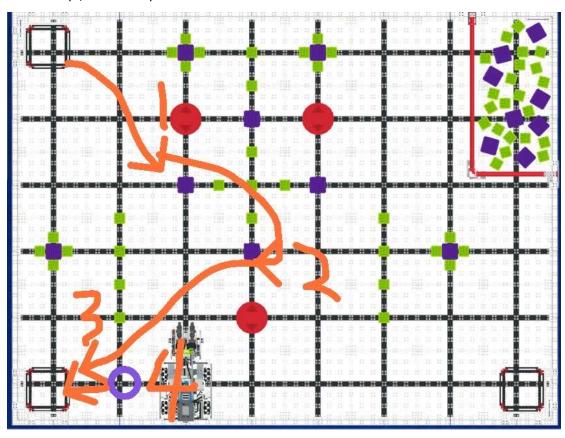
arm_motor_group.spin_to_position(330, DEGREES)

drivetrain.drive_for(FORWARD, 100, MM)

intake_motor_group.spin(REVERSE)

Put the 2<sup>nd</sup> purple block into 2<sup>nd</sup> basket.

wait(1, SECONDS)
```



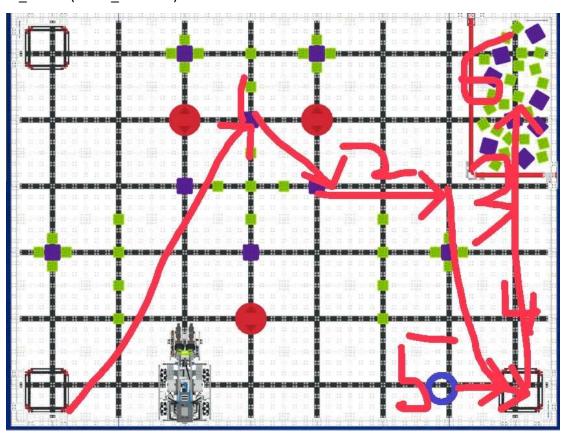
drivetrain.turn\_for(LEFT, 25, DEGREES)
drivetrain.drive\_for(REVERSE, 900, MM)
intake\_motor\_group.spin(FORWARD)
arm\_motor\_group.spin\_to\_position(0, DEGREES)
drivetrain.turn\_for(LEFT, 150, DEGREES)
drivetrain.drive\_for(FORWARD, 200, MM)

Get 1<sup>st</sup> purple block and push 2<sup>nd</sup> block together.

drivetrain.turn\_for(RIGHT, 20, DEGREES)
drivetrain.drive\_for(FORWARD, 300, MM)
drivetrain.drive\_for(REVERSE, 300, MM)
drivetrain.turn\_for(RIGHT, 35, DEGREES)
arm\_motor\_group.spin\_to\_position(330, DEGREES)

```
drivetrain.drive_for(FORWARD, 1000, MM)
drivetrain.turn_for(RIGHT, 50, DEGREES)
drivetrain.drive_for(FORWARD, 650, MM)
intake_motor_group.spin(REVERSE) Put the 1<sup>st</sup> purple block into 1<sup>st</sup> basket.
wait(1, SECONDS)
drivetrain.drive_for(REVERSE, 100, MM)
arm_motor_group.spin_to_position(0, DEGREES)
intake_motor_group.spin(FORWARD)
wait(0.2, SECONDS)
drivetrain.turn_for(LEFT, 10, DEGREES)
drivetrain.turn_for(RIGHT, 10, DEGREES)
drivetrain.turn for(RIGHT, 10, DEGREES)
drivetrain.turn_for(LEFT, 10, DEGREES) 4 steps to try to get 2<sup>nd</sup> purple block.
arm_motor_group.spin_to_position(330, DEGREES)
drivetrain.drive_for(FORWARD, 20, MM)
intake_motor_group.spin(REVERSE)
                                        Put the 2<sup>nd</sup> purple block into 1<sup>st</sup> basket.
wait(1, SECONDS)
drivetrain.turn_for(LEFT, 135, DEGREES)
drivetrain.drive(FORWARD)
                                                       Rush into parking area.
```

## vr\_thread(when\_started1)



Purple Circle= The pushed purple block