```python
#region VEXcode Generated Robot Configuration
import math
import random
from vexcode_vrc import *
from vexcode_vrc.events import get_Task_func

# Brain should be defined by default
brain=Brain()

drivetrain = Drivetrain("drivetrain", 0)
arm_motor = Motor("ArmMotor", 3)
rotation = Rotation("Rotation", 7)
intake_motor = Motor("IntakeMotor", 8)
optical = Optical("Optical", 11)
gps = GPS("GPS", 20)

#endregion VEXcode Generated Robot Configuration
# -----------------------------------------
#
#   Project:      VEXcode Project
#   Author:       VEX
#   Created:
#   Description:  VEXcode VR Python Project
#
# -----------------------------------------

# Add project code in "main"

def initialize():
    drivetrain.set_drive_velocity(100, PERCENT);
    drivetrain.set_turn_velocity(100,PERCENT);
    intake_motor.set_velocity(100, PERCENT);
    arm_motor.set_velocity(100,PERCENT);

def main():

    initialize() #---------initialize  the motor setting---------------/

    arm_motor.spin(FORWARD);
    drivetrain.drive_for(FORWARD, 1420, MM);
    wait(0.6,SECONDS);
    drivetrain.turn_for(LEFT,90,DEGREES);

    intake_motor.spin(REVERSE);            #----------First tribal in---------#
    drivetrain.drive_for(FORWARD, 50, MM);
    wait(0.6,SECONDS);
    intake_motor.spin(FORWARD);
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drivetrain.turn_for(RIGHT,90,DEGREES); #-----Getting the second tribal--------#
wait(0.2,SECONDS);
drivetrain.turn_for(LEFT,90,DEGREES);
intake_motor.spin(REVERSE);    #------------Second tribal in ---------------#
wait(0.7,SECONDS);
intake_motor.spin(FORWARD);    #------------Getting the third tribal--------------#
drivetrain.turn_for(RIGHT,180,DEGREES);
wait(0.5,SECONDS);
drivetrain.turn_for(LEFT,45,DEGREES);
intake_motor.stop();
drivetrain.drive_for(FORWARD, 450, MM);
drivetrain.turn_for(RIGHT,45,DEGREES);
intake_motor.spin(REVERSE);    #shooting the first ball#
drivetrain.drive_for(FORWARD, 750, MM);
drivetrain.drive_for(REVERSE, 600, MM);
intake_motor.spin(FORWARD);
drivetrain.turn_for(RIGHT,45,DEGREES);
drivetrain.drive_for(FORWARD, 100, MM);
wait(0.3,SECONDS);
drivetrain.turn_for(LEFT,45,DEGREES);
drivetrain.drive_for(REVERSE, 150, MM);
intake_motor.spin(REVERSE);   #shooting the second ball#
drivetrain.drive_for(FORWARD, 650, MM);
drivetrain.drive_for(REVERSE, 650, MM);
intake_motor.stop();
drivetrain.turn_for(LEFT,45,DEGREES);
intake_motor.spin(FORWARD);
drivetrain.drive_for(FORWARD, 300, MM);

drivetrain.drive_for(REVERSE, 200, MM);
drivetrain.turn_for(RIGHT,45,DEGREES);
drivetrain.drive_for(REVERSE, 170, MM);
intake_motor.spin(REVERSE);     #shooting the third ball#
drivetrain.drive_for(FORWARD, 700, MM);
drivetrain.drive_for(REVERSE, 300, MM);
drivetrain.turn_for(LEFT,90,DEGREES);
intake_motor.spin(FORWARD);
drivetrain.drive_for(FORWARD, 600, MM);
intake_motor.stop();
drivetrain.drive_for(REVERSE, 900, MM);
drivetrain.turn_for(RIGHT,90,DEGREES);
drivetrain.drive_for(REVERSE, 210, MM);
intake_motor.spin(REVERSE);   #shooting the fourth ball#
drivetrain.drive_for(FORWARD, 650, MM);
drivetrain.drive_for(REVERSE, 370, MM);
drivetrain.turn_for(RIGHT,90,DEGREES);
intake_motor.spin(FORWARD);
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drivetrain.drive_for(FORWARD, 250, MM);
wait(0.2,SECONDS);
drivetrain.turn_for(LEFT,90,DEGREES);


drivetrain.drive_for(REVERSE, 250, MM);
intake_motor.spin(REVERSE);       #shooting the fifth ball#
drivetrain.drive_for(FORWARD, 550, MM);

drivetrain.drive_for(REVERSE, 300, MM);
drivetrain.turn_for(RIGHT,90,DEGREES);
intake_motor.spin(FORWARD);
drivetrain.drive_for(FORWARD, 500, MM);
wait(0.2,SECONDS);
drivetrain.drive_for(REVERSE, 500, MM);
drivetrain.turn_for(LEFT,90,DEGREES);
drivetrain.drive_for(REVERSE, 300, MM);
intake_motor.spin(REVERSE); #shooting the sixth ball#
#------------------------Cross to the other side-------------------------#
drivetrain.drive_for(FORWARD, 650, MM);
# wait(0.8,SECONDS);
drivetrain.drive_for(FORWARD, 80, MM);
drivetrain.turn_for(RIGHT,40,DEGREES);
intake_motor.spin(FORWARD);
drivetrain.drive_for(FORWARD, 1650, MM); #-----grab bottom right cornner---------#
wait(0.2,SECONDS);
drivetrain.drive_for(REVERSE, 300, MM);
drivetrain.turn_for(LEFT,115,DEGREES);
# drivetrain.drive_for(REVERSE, 100, MM);
intake_motor.spin(REVERSE); #shooting the seventh ball#
drivetrain.drive_for(FORWARD, 300, MM);
wait(0.4,SECONDS);
drivetrain.turn_for(LEFT,160,DEGREES);
drivetrain.drive_for(FORWARD, 750, MM);
drivetrain.turn_for(RIGHT,55,DEGREES);
intake_motor.spin(FORWARD);
drivetrain.drive_for(FORWARD, 800, MM); #------Grab the ball under the bar----#
wait(0.1,SECONDS);
drivetrain.drive_for(REVERSE, 850, MM);
drivetrain.turn_for(RIGHT,130,DEGREES);
intake_motor.spin(REVERSE); #shooting the eighth ball#
drivetrain.drive_for(FORWARD, 600, MM);
wait(0.1,SECONDS);
drivetrain.drive_for(REVERSE, 574, MM);
drivetrain.turn_for(LEFT,132,DEGREES);
intake_motor.spin(FORWARD);
drivetrain.drive_for(FORWARD, 2250, MM);
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drivetrain.turn_for(LEFT,45,DEGREES);
wait(0.2,SECONDS);


#Repeating getting tribal and shooting:
#first time:
drivetrain.drive_for(REVERSE, 1450, MM)
drivetrain.turn_for(LEFT, 135, DEGREES)
intake_motor.spin(REVERSE)   #shooting the ninth ball#
drivetrain.drive_for(FORWARD, 600, MM)
drivetrain.drive_for(REVERSE, 700, MM)

drivetrain.turn_for(RIGHT, 135, DEGREES)
intake_motor.spin(FORWARD)
drivetrain.drive_for(FORWARD, 1450, MM)

#second time:
drivetrain.drive_for(REVERSE, 1500, MM)
drivetrain.turn_for(LEFT, 135, DEGREES)
intake_motor.spin(REVERSE)   #shooting the tenth ball#
drivetrain.drive_for(FORWARD, 850, MM)
drivetrain.drive_for(REVERSE, 750, MM)

drivetrain.turn_for(RIGHT, 135, DEGREES)
intake_motor.spin(FORWARD)
drivetrain.drive_for(FORWARD, 1500, MM)

# #third time:
drivetrain.drive_for(REVERSE, 1550, MM)
drivetrain.turn_for(LEFT, 135, DEGREES)
intake_motor.spin(REVERSE)   #shooting the eleventh ball#
drivetrain.drive_for(FORWARD, 900, MM)
drivetrain.drive_for(REVERSE, 900, MM)

drivetrain.turn_for(RIGHT, 135, DEGREES)
intake_motor.spin(FORWARD)
drivetrain.drive_for(FORWARD, 1600, MM)

# #fourth time:
drivetrain.drive_for(REVERSE, 1600, MM)
drivetrain.turn_for(LEFT, 135, DEGREES)
intake_motor.spin(REVERSE)   #shooting the Twelfth ball#



drivetrain.drive_for(FORWARD, 1200, MM)
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    drivetrain.drive_for(REVERSE, 200, MM)



# VR threads TEST — Do not delete
vr_thread(main)
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