```
//
// Arduino Nano program for Open Day robot
// Written 1-Dec-2023
//

void motors(int left, int right);

void setup()
{
  // Digital output pins for motor control
  pinMode(5, OUTPUT); // left motor forward
  pinMode(6, OUTPUT); // left motor reverse
  pinMode(7, OUTPUT); // right motor forward
  pinMode(8, OUTPUT); // right motor reverse
}

void loop()
{
  int left_sensor, right_sensor; // sensor variables

  left_sensor = analogRead(0); // read left sensor voltage
  right_sensor = analogRead(1); // read right sensor voltage

  if (left_sensor < 512)
  {
    // When left sensor is off the track,
    // left motor forward, right motor stop
    motors(1, 0);
  }
  else if (right_sensor < 512)
  {
    // When right sensor is off the track,
    // left motor stop, right motor forward
    motors(0, 1);
  }
  else
  {
    // When both sensors are on the track,
    // both motors forward
    motors(1, 1);
  }
}

// motor control function
void motors(int left, int right)
{
  // each argument controls one motor
  // motor forward for all values > 0
  // motor reverse for all values < 0
  // motor stops when value is zero
  digitalWrite(5, left > 0);
  digitalWrite(6, left < 0);
  digitalWrite(7, right > 0);
  digitalWrite(8, right < 0);
}
```