

# CODIGO DE LA NACIONAL 2025

```
#include <Servo.h>

const int startButtonPin = 5;
const int motorControlPin = 14;
bool motorStarted = false;

const int nar = 23;
const int nab = 24;

const int azul = 25;

Servo barrier;

int currentAngle = 88;

void setup(){
  // put your setup code here, to run once:

  pinMode(startButtonPin, INPUT_PULLUP); // Active LOW button
  pinMode(motorControlPin, OUTPUT);
  digitalWrite(motorControlPin, LOW); // Motor off initially

  pinMode(nar, INPUT);
  pinMode(nab, INPUT);
  pinMode(azul, INPUT);

  // Servo setup
  barrier.attach(52);
  barrier.write(currentAngle); // Start with barrier down

  Serial.begin(9600);
  barrier.attach(52);

  barrier.write(currentAngle);
}
```

```
int cont = 0;
void loop() {
  // put your main code here, to run repeatedly:

  if (!motorStarted && digitalRead(startButtonPin) == LOW) {
    motorStarted = true;
    digitalWrite(motorControlPin, HIGH);
    Serial.println("Motor started!");
    delay(500); // debounce delay
  }

  if (!motorStarted) {
    // Wait for button press, skip the rest
    return;
  }

  delay(300);
  barrier.write(98);
  delay(30000);
  cont += 1;
  if(cont >= 1){
    digitalWrite(motorControlPin, LOW);
  }
}
```