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#include <Arduino.h>
// spray bottle pin GPIO18
int sprayBottle = 18;

char incomingData; // for incoming serial data

void setup()
{
  // start Serial Monitor
  Serial.begin(9600);
  pinMode(sprayBottle, OUTPUT);
}

void loop()
{
  if (Serial.available() > 0)
  {
    // read the incoming byte:
    incomingData = Serial.read();

    if (incomingData == 'S')
    {
      // HERE CODE FOR BOTTLE SPRAY
      digitalWrite(sprayBottle, HIGH);
      delay (1000);
      digitalWrite(sprayBottle, LOW);

      incomingData = 'A';
    }
  }
  unsigned long previousMillis = 0; // Stores the last time the spray was activated
  const unsigned long interval = 300000; // 5 minutes in milliseconds

  void loop()
  {
    if (millis() - previousMillis >= interval)
    {
      previousMillis = millis(); // Update the last execution time

      // Activate spray bottle
      digitalWrite(sprayBottle, HIGH);
      delay(1000); // Spray duration
      digitalWrite(sprayBottle, LOW);
    }

    // Serial input functionality remains unchanged
    if (Serial.available() > 0)
    {
      incomingData = Serial.read();
      if (incomingData == 'S')
      {
        digitalWrite(sprayBottle, HIGH);
        delay(1000);
        digitalWrite(sprayBottle, LOW);
        incomingData = 'A';
      }
    }
  }
}

```

