



PRACTICAL REPORT

FOR IOT PRACTICAL



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6.15 – Getting Inputs From Sensor

You want to respond to the rate of rotation. This can be used to keep a vehicle or robot moving in a straight line or turning at a desired rate.

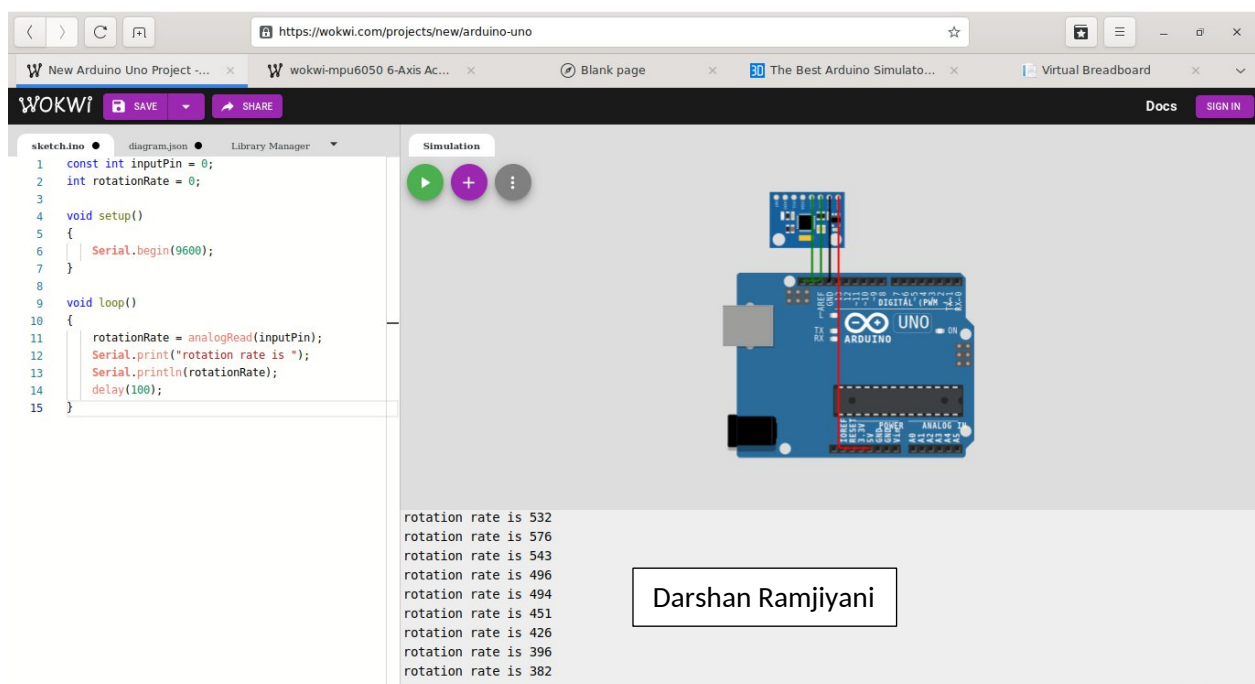
❖ Arduino Code:

```
const int inputPin = 0;
int rotationRate = 0;

void setup()
{
    Serial.begin(9600);
}

void loop()
{
    rotationRate = analogRead(inputPin);
    Serial.print("rotation rate is ");
    Serial.println(rotationRate);
    delay(100);
}
```

❖ Output / Circuit Diagram:



The screenshot shows the Wokwi online Arduino IDE. On the left, the 'sketch.ino' file contains the following code:

```
1 const int inputPin = 0;
2 int rotationRate = 0;
3
4 void setup()
5 {
6     Serial.begin(9600);
7 }
8
9 void loop()
10 {
11     rotationRate = analogRead(inputPin);
12     Serial.print("rotation rate is ");
13     Serial.println(rotationRate);
14     delay(100);
15 }
```

On the right, the 'Simulation' window displays a virtual Arduino Uno board with a sensor module connected. Below the board, the serial output shows the following data:

```
rotation rate is 532
rotation rate is 576
rotation rate is 543
rotation rate is 496
rotation rate is 494
rotation rate is 451
rotation rate is 426
rotation rate is 396
rotation rate is 382
```

A signature box at the bottom right of the simulation area contains the text: Darshan Ramjiyani