PH SENSOR BOARD.PY

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| DATE | 25 NOVEMBER 2022 |
| Student Name | PNT2022MID11410 |
| PROJECT Name | REAL TIME RIVER WATER QUALITY MONITORING AND CONTROL SYSTEM |

**CODE :**

**import datetime as dt**

**import time**

**import board**

**import busio**

**from anyleaf import PhSensor, OnBoard**

**LOOP\_DELAY = 60 \* 5 # Time to sleep, in seconds.**

**LOG\_FILENAME = "ph\_readings.csv"**

**def main():**

**i2c = busio.I2C(board.SCL, board.SDA)**

**ph\_sensor = PhSensor(i2c, LOOP\_DELAY)**

**while True:**

**ph = ph\_sensor.read(OnBoard())**

**timestamp = dt.datetime.now()**

**# Open our log file in append-line mode. This way new lines can be**

**# written without overwriting existing ones.**

**with open(LOG\_FILENAME, 'a') as f:**

**# Write the timestamp to the first column, and pH to the second.**

**f.write(f"{timestamp.isoformat()},{round(ph, 2)}\n")**

**# Wait for 5 minutes before taking and logging another reading.**

**time.sleep(LOOP\_DELAY)**

**if \_\_name\_\_ == "\_\_main\_\_":**

**main()**