NOISE POLLUTION MONITORING

```
import BlynkLib
import time
import random  # Replace with actual noise sensor library

# Initialize the Blynk connection
BLYNK_AUTH = 'your_blynk_auth_token'
blynk = BlynkLib.Blynk(BLYNK_AUTH)

# Replace with your noise sensor setup
def read_noise_level():
# Replace this with code to read noise level from your sensor
return random.randint(50, 100)  # Simulated noise level for testing

# Define a function to update Blynk with noise level
def update_noise_level():
noise_level = read_noise_level()
blynk.virtual_write(0, noise_level) # Update the VD0 widget with the noise level
print(f"Noise Level: {noise_level} dB")

# Main loop to continuously update noise level
while True:
blynk.run()
update_noise_level()
time.sleep(10)  # Adjust this interval as needed
```

EXPLAINATION

Import Libraries:

BlynkLib: This library is used to connect to the Blynk server and interact with Blynk widgets.

time: It's used to add a delay between noise level updates.

random: This is used for generating simulated noise levels. You should replace this with code for your actual noise sensor library.

Initialize Blynk Connection:

You need to replace 'your_blynk_auth_token' with your Blynk authentication token.

blynk is an instance of the BlynkLib used for communication with the Blynk server.

Read Noise Level:

The read_noise_level function should be replaced with code that reads the actual noise level from your sensor. In this example, it's generating a random noise level between 50 and 100 dB for testing purposes.

Update Noise Level on Blynk:

The update_noise_level function reads the noise level using the read_noise_level function, updates the Value Display widget (VD0) in your Blynk project with the noise level using blynk.virtual_write, and prints the noise level to the console.

Main Loop:

The main loop runs indefinitely (while True).

blynk.run() handles communication with the Blynk server.

The update_noise_level function is called to update the noise level on Blynk.

time.sleep(10) adds a 10-second delay between updates. You can adjust this interval according to your monitoring requirements.

This script continuously connects to the Blynk server, reads the noise level from your sensor, updates the Blynk app, and repeats the process with a specified time interval. Make sure to adapt this code to your specific noise sensor hardware and Blynk project setup.