

QUESTION:

Develop a python code for publishing random sensor data (Water turbidity, pH values, if required temperature) to the IBM IoT Platform.

The screenshot displays the IBM Watson IoT Platform interface. On the left, a sidebar contains navigation icons. The main area shows a table of devices with columns: Device ID, Status, Device Type, and Class ID. A device with ID 1234567 is selected, showing a status of 'Disconnected' and type 'ESP32_dist'. Below the table, a 'Recent Events' section lists five events, each with a timestamp, value, and format (JSON). A modal window titled 'Simulations' is open on the right, showing '1/50 Simulations Running' and a 'New Simulation' button. The modal also displays the device type 'ESP32_dist' and a list of devices, including the selected one. At the bottom of the modal, it shows '403 events sent' and '8.9 KB sent'.

Event	Value	Format
event01	{"Temperature":23,"Ph-value":5,"humidity":86}	json
event01	{"Temperature":36,"Ph-value":2,"humidity":60}	json
event01	{"Temperature":37,"Ph-value":7,"humidity":88}	json
event01	{"Temperature":96,"Ph-value":12,"humidity":65}	json
event01	{"Temperature":91,"Ph-value":9,"humidity":60}	json

The screenshot displays the configuration interface for a new event type in the IBM Watson IoT Platform. The title is 'Device Type: ESP32_dist'. The 'Events' section shows a list of events, with 'event01' selected. The 'Event type name' is 'event01'. The 'Schedule' is set to '20' and 'Every Minute'. The 'Payload' section shows a JSON payload with random values for 'Temperature', 'Ph-value', and 'humidity'. The 'Payload' field is a text editor with the following content:

```
0 {  
1   "Temperature": random(10,100),  
2   "Ph-value": random(0,14),  
3   "humidity": random(0,100)  
4 }  
5
```

At the bottom, there is an 'Upload a CSV file' button and 'Cancel' and 'Save' buttons.