

FINAL CODE:

Team ID	PNT2022TMIN26604
Project Name	Smart Waste Management For Metropolitan Cities

```
[
  {
    "id": "6ed1189c17ed0439",
    "type": "tab",
    "label": "Flow 1",
    "disabled": false,
    "info": "",
    "env": []
  },
  {
    "id": "ce1790a002f55f3a",
    "type": "ibmiot in",
    "z": "6ed1189c17ed0439",
    "authentication": "apiKey",
    "apiKey": "bf9996433728395e",
    "inputType": "evt",
    "logicalInterface": "",
    "ruleId": "",
```

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"deviceId": "BIN1ID",
"applicationId": "",
"deviceType": "BIN1",
"eventType": "+",
"commandType": "",
"format": "json",
"name": "IBM IoT",
"service": "registered",
"allDevices": "",
"allApplications": "",
"allDeviceTypes": false,
"allLogicalInterfaces": "",
"allEvents": true,
"allCommands": "",
"allFormats": "",
"qos": 0,
"x": 250,
"y": 180,
"wires": [
  [
    "b678812da97d9d1a",
    "f720c62cad238799",
    "35b263513ea4f373"
```

```
    ]  
  ]  
},  
{  
  "id": "b678812da97d9d1a",  
  "type": "debug",  
  "z": "6ed1189c17ed0439",  
  "name": "msg.payload",  
  "active": true,  
  "tosidebar": true,  
  "console": false,  
  "tostatus": false,  
  "complete": "payload",  
  "targetType": "msg",  
  "statusVal": "",  
  "statusType": "auto",  
  "x": 610,  
  "y": 180,  
  "wires": []  
},  
{  
  "id": "f720c62cad238799",  
  "type": "function",
```

```
"z": "6ed1189c17ed0439",
"name": "Distance 1",
"func": "msg.payload = msg.payload.dist\nglobal.set('d',msg.payload)\nreturn
msg;",
"outputs": 1,
"noerr": 0,
"initialize": "",
"finalize": "",
"libs": [],
"x": 430,
"y": 220,
"wires": [
  [
    "5dcbaf252dc78b06",
    "b678812da97d9d1a"
  ]
],
},
{
  "id": "35b263513ea4f373",
  "type": "function",
  "z": "6ed1189c17ed0439",
  "name": "LOAD cell 1",
```

```
"func": "msg.payload=msg. payload.load\nglobal.set('l', msg.payload)\nreturn\nmsg;",  
  "outputs": 1,  
  "noerr": 0,  
  "initialize": "",  
  "finalize": "",  
  "libs": [],  
  "x": 430,  
  "y": 300,  
  "wires": [  
    [  
      "b7ac8ba401c6cab8"  
    ]  
  ]  
},  
{  
  "id": "5dcbafe252dc78b06",  
  "type": "ui_gauge",  
  "z": "6ed1189c17ed0439",  
  "name": "",  
  "group": "f3b64a4198b3c46c",  
  "order": 1,  
  "width": 4,
```

```
"height": 4,  
"gtype": "gage",  
"title": "Distance 1",  
"label": "Cm",  
"format": "{{value}}",  
"min": 0,  
"max": "100",  
"colors": [  
    "#00b500",  
    "#e6e600",  
    "#ca3838"  
],  
"seg1": "",  
"seg2": "",  
"className": "",  
"x": 710,  
"y": 240,  
"wires": []  
},  
{  
    "id": "b7ac8ba401c6cab8",  
    "type": "ui_gauge",  
    "z": "6ed1189c17ed0439",
```

```
"name": "",  
"group": "f3b64a4198b3c46c",  
"order": 2,  
"width": 4,  
"height": 4,  
"gtype": "gage",  
"title": "LOAD CELL 1",  
"label": "KG",  
"format": "{{value}}",  
"min": 0,  
"max": "100",  
"colors": [  
    "#00b500",  
    "#e6e600",  
    "#ca3838"  
],  
"seg1": "",  
"seg2": "",  
"className": "",  
"x": 720,  
"y": 300,  
"wires": []  
},
```

```
{
  "id": "5de18859cabb1a5d",
  "type": "http in",
  "z": "6ed1189c17ed0439",
  "name": "",
  "url": "/sensor",
  "method": "get",
  "upload": false,
  "swaggerDoc": "",
  "x": 210,
  "y": 420,
  "wires": [
    [
      "80650c336af78c61"
    ]
  ]
},
{
  "id": "5ab7d1be9c4e2831",
  "type": "http response",
  "z": "6ed1189c17ed0439",
  "name": "",
  "statusCode": "",
```



```
"headers": {},  
"x": 710,  
"y": 400,  
"wires": []  
},  
{  
  "id": "80650c336af78c61",  
  "type": "function",  
  "z": "6ed1189c17ed0439",  
  "name": "function 1",  
  "func": "msg.payload = { \"dist\": global.get('d'), \"load\":  
global.get('l')}\nreturn msg;",  
  "outputs": 1,  
  "noerr": 0,  
  "initialize": "",  
  "finalize": "",  
  "libs": [],  
  "x": 460,  
  "y": 420,  
  "wires": [  
    [  
      "5ab7d1be9c4e2831"  
    ]  
  ]  
}
```

```
]
},
{
  "id": "e0022c1a3e189dea",
  "type": "ibmiot in",
  "z": "6ed1189c17ed0439",
  "authentication": "apiKey",
  "apiKey": "bf9996433728395e",
  "inputType": "evt",
  "logicalInterface": "",
  "ruleId": "",
  "deviceId": "BIN2ID",
  "applicationId": "",
  "deviceType": "BIN2",
  "eventType": "+",
  "commandType": "",
  "format": "json",
  "name": "IBM IoT",
  "service": "registered",
  "allDevices": "",
  "allApplications": "",
  "allDeviceTypes": false,
  "allLogicalInterfaces": "",
```

```
"allEvents": true,
"allCommands": "",
"allFormats": "",
"qos": 0,
"x": 250,
"y": 500,
"wires": [
  [
    "2a22e946c6d5f734",
    "233a55d8b0e40a46",
    "a5ed197df7ced05a"
  ]
],
},
{
  "id": "233a55d8b0e40a46",
  "type": "function",
  "z": "6ed1189c17ed0439",
  "name": "Distance 2",
  "func": "msg.payload = msg.payload.dist\nglobal.set('d',msg.payload)\nreturn\nmsg;",
  "outputs": 1,
  "noerr": 0,
```

```
"initialize": "",
"finalize": "",
"libs": [],
"x": 450,
"y": 540,
"wires": [
  [
    "2a22e946c6d5f734",
    "9b44a1863803e38a"
  ]
],
},
{
  "id": "a5ed197df7ced05a",
  "type": "function",
  "z": "6ed1189c17ed0439",
  "name": "LOAD cell 2",
  "func": "msg.payload=msg. payload.load\nglobal.set('l', msg.payload)\nreturn msg;",
  "outputs": 1,
  "noerr": 0,
  "initialize": "",
  "finalize": "",
```

```
"libs": [],  
"x": 450,  
"y": 600,  
"wires": [  
  [  
    "40ccb32035a0f55f"  
  ]  
]  
},  
{  
  "id": "2a22e946c6d5f734",  
  "type": "debug",  
  "z": "6ed1189c17ed0439",  
  "name": "msg.payload",  
  "active": true,  
  "tosidebar": true,  
  "console": false,  
  "tostatus": false,  
  "complete": "payload",  
  "targetType": "msg",  
  "statusVal": "",  
  "statusType": "auto",  
  "x": 650,
```

```
"y": 480,
"wires": []
},
{
  "id": "9b44a1863803e38a",
  "type": "ui_gauge",
  "z": "6ed1189c17ed0439",
  "name": "",
  "group": "f3b64a4198b3c46c",
  "order": 4,
  "width": 4,
  "height": 4,
  "gtype": "gage",
  "title": "Distance 2",
  "label": "Cm",
  "format": "{{value}}",
  "min": 0,
  "max": "100",
  "colors": [
    "#00b500",
    "#e6e600",
    "#ca3838"
  ],
}
```

```
"seg1": "",
"seg2": "",
"className": "",
"x": 710,
"y": 540,
"wires": []
},
{
  "id": "40ccb32035a0f55f",
  "type": "ui_gauge",
  "z": "6ed1189c17ed0439",
  "name": "",
  "group": "f3b64a4198b3c46c",
  "order": 5,
  "width": 4,
  "height": 4,
  "gtype": "gage",
  "title": "LOAD CELL 2",
  "label": "KG",
  "format": "{{value}}",
  "min": 0,
  "max": "100",
  "colors": [
```

```
        "#00b500",
        "#e6e600",
        "#ca3838"
    ],
    "seg1": "",
    "seg2": "",
    "className": "",
    "x": 720,
    "y": 580,
    "wires": []
},
{
    "id": "60298a7291818343",
    "type": "http in",
    "z": "6ed1189c17ed0439",
    "name": "",
    "url": "/sensor",
    "method": "get",
    "upload": false,
    "swaggerDoc": "",
    "x": 190,
    "y": 660,
    "wires": [
```



```
[
  "616151913ceb65e2"
]
},
{
  "id": "616151913ceb65e2",
  "type": "function",
  "z": "6ed1189c17ed0439",
  "name": "function 2",
  "func": "msg.payload = { \"dist\": global.get('d'), \"load\":  
global.get('l')}\\nreturn msg;",
  "outputs": 1,
  "noerr": 0,
  "initialize": "",
  "finalize": "",
  "libs": [],
  "x": 420,
  "y": 660,
  "wires": [
    [
      "332391e22b2af8e8"
    ]
  ]
}
```

```
]
},
{
  "id": "332391e22b2af8e8",
  "type": "http response",
  "z": "6ed1189c17ed0439",
  "name": "",
  "statusCode": "",
  "headers": {},
  "x": 670,
  "y": 660,
  "wires": []
},
{
  "id": "4d33e05e616db2bb",
  "type": "ibmiot in",
  "z": "6ed1189c17ed0439",
  "authentication": "apiKey",
  "apiKey": "bf9996433728395e",
  "inputType": "evt",
  "logicalInterface": "",
  "ruleId": "",
  "deviceId": "BIN3ID",
```

```
"applicationId": "",
"deviceType": "BIN3",
"eventType": "+",
"commandType": "",
"format": "json",
"name": "IBM IoT",
"service": "registered",
"allDevices": "",
"allApplications": "",
"allDeviceTypes": false,
"allLogicalInterfaces": "",
"allEvents": true,
"allCommands": "",
"allFormats": "",
"qos": 0,
"x": 250,
"y": 760,
"wires": [
  [
    "c7ddb56ba52e82df",
    "fbf611802e58a9d1",
    "231892da1f5ab0fb"
  ]
]
```

```
]
},
{
  "id": "1c11c86fbb36f097",
  "type": "http in",
  "z": "6ed1189c17ed0439",
  "name": "",
  "url": "/sensor",
  "method": "get",
  "upload": false,
  "swaggerDoc": "",
  "x": 190,
  "y": 900,
  "wires": [
    [
      "cdea8fe7bd7a2f5e"
    ]
  ]
},
{
  "id": "c49cd92e337f886b",
  "type": "debug",
  "z": "6ed1189c17ed0439",
```

```
"name": "msg.payload",
"active": true,
"tosidebar": true,
"console": false,
"tostatus": false,
"complete": "payload",
"targetType": "msg",
"statusVal": "",
"statusType": "auto",
"x": 750,
"y": 940,
"wires": []
},
{
  "id": "c7ddb56ba52e82df",
  "type": "debug",
  "z": "6ed1189c17ed0439",
  "name": "msg.payload",
  "active": true,
  "tosidebar": true,
  "console": false,
  "tostatus": false,
  "complete": "payload",
```

```
"targetType": "msg",
"statusVal": "",
"statusType": "auto",
"x": 690,
"y": 760,
"wires": []
},
{
  "id": "71be31afc89560dd",
  "type": "function",
  "z": "6ed1189c17ed0439",
  "name": "Distance 4",
  "func": "msg.payload = msg.payload.dist\nglobal.set('d',msg.payload)\nreturn\nmsg;",
  "outputs": 1,
  "noerr": 0,
  "initialize": "",
  "finalize": "",
  "libs": [],
  "x": 470,
  "y": 980,
  "wires": [
    [
```

```
        "c49cd92e337f886b",
        "b88ea394cc4571c3"
    ]
]
},
{
    "id": "fbf611802e58a9d1",
    "type": "function",
    "z": "6ed1189c17ed0439",
    "name": "Distance 3",
    "func": "msg.payload = msg.payload.dist\nglobal.set('d',msg.payload)\nreturn\nmsg;",
    "outputs": 1,
    "noerr": 0,
    "initialize": "",
    "finalize": "",
    "libs": [],
    "x": 470,
    "y": 780,
    "wires": [
        [
            "c7ddb56ba52e82df",
            "240d2e6c8f487fd8"
```

```
    ]
  ]
},
{
  "id": "231892da1f5ab0fb",
  "type": "function",
  "z": "6ed1189c17ed0439",
  "name": "LOAD cell 3",
  "func": "msg.payload=msg. payload.load\nglobal.set('l', msg.payload)\nreturn\nmsg;",
  "outputs": 1,
  "noerr": 0,
  "initialize": "",
  "finalize": "",
  "libs": [],
  "x": 470,
  "y": 820,
  "wires": [
    [
      "e18c17929284e061"
    ]
  ]
},
```



```
{
  "id": "a0cbff62cdd2e77c",
  "type": "function",
  "z": "6ed1189c17ed0439",
  "name": "LOAD cell 4",
  "func": "msg.payload=msg. payload.load\nglobal.set('l', msg.payload)\nreturn
msg;",
  "outputs": 1,
  "noerr": 0,
  "initialize": "",
  "finalize": "",
  "libs": [],
  "x": 470,
  "y": 1020,
  "wires": [
    [
      "c7a15e2a5bf9c2da"
    ]
  ]
},
{
  "id": "cdea8fe7bd7a2f5e",
  "type": "function",
```

```
"z": "6ed1189c17ed0439",  
"name": "function 3",  
"func": "msg.payload = { \"dist\": global.get('d'), \"load\":  
global.get('l')}\\nreturn msg;",  
"outputs": 1,  
"noerr": 0,  
"initialize": "",  
"finalize": "",  
"libs": [],  
"x": 420,  
"y": 900,  
"wires": [  
  [  
    "9bfb685be1503933"  
  ]  
]  
,  
{  
  "id": "9bfb685be1503933",  
  "type": "http response",  
  "z": "6ed1189c17ed0439",  
  "name": "",  
  "statusCode": "",
```

```
"headers": {},  
"x": 690,  
"y": 900,  
"wires": []  
},  
{  
  "id": "240d2e6c8f487fd8",  
  "type": "ui_gauge",  
  "z": "6ed1189c17ed0439",  
  "name": "",  
  "group": "f3b64a4198b3c46c",  
  "order": 15,  
  "width": 4,  
  "height": 4,  
  "gtype": "gage",  
  "title": "Distance 3",  
  "label": "Cm",  
  "format": "{{value}}",  
  "min": 0,  
  "max": "100",  
  "colors": [  
    "#00b500",  
    "#e6e600",
```

```
    "#ca3838"

    ],
    "seg1": "",
    "seg2": "",
    "className": "",
    "x": 830,
    "y": 800,
    "wires": []
  },
  {
    "id": "b88ea394cc4571c3",
    "type": "ui_gauge",
    "z": "6ed1189c17ed0439",
    "name": "",
    "group": "f3b64a4198b3c46c",
    "order": 18,
    "width": 4,
    "height": 4,
    "gtype": "gage",
    "title": "Distance 4",
    "label": "Cm",
    "format": "{{value}}",
    "min": 0,
```

```
"max": "100",  
"colors": [  
    "#00b500",  
    "#e6e600",  
    "#ca3838"  
],  
"seg1": "",  
"seg2": "",  
"className": "",  
"x": 750,  
"y": 1000,  
"wires": []  
},  
{  
    "id": "e18c17929284e061",  
    "type": "ui_gauge",  
    "z": "6ed1189c17ed0439",  
    "name": "",  
    "group": "f3b64a4198b3c46c",  
    "order": 16,  
    "width": 4,  
    "height": 4,  
    "gtype": "gage",
```

```
"title": "LOAD CELL 3",  
"label": "KG",  
"format": "{{value}}",  
"min": 0,  
"max": "100",  
"colors": [  
    "#00b500",  
    "#e6e600",  
    "#ca3838"  
],  
"seg1": "",  
"seg2": "",  
"className": "",  
"x": 840,  
"y": 840,  
"wires": []  
},  
{  
    "id": "147146a0342debce",  
    "type": "ibmiot in",  
    "z": "6ed1189c17ed0439",  
    "authentication": "apiKey",  
    "apiKey": "bf9996433728395e",
```

```
"inputType": "evt",
"logicalInterface": "",
"ruleId": "",
"deviceId": "BIN4ID",
"applicationId": "",
"deviceType": "BIN4",
"eventType": "+",
"commandType": "",
"format": "json",
"name": "IBM IoT",
"service": "registered",
"allDevices": "",
"allApplications": "",
"allDeviceTypes": false,
"allLogicalInterfaces": "",
"allEvents": true,
"allCommands": "",
"allFormats": "",
"qos": 0,
"x": 230,
"y": 1000,
"wires": [
  [
```

```
        "71be31afc89560dd",
        "a0cbff62cdd2e77c",
        "c49cd92e337f886b"
    ]
]
},
{
    "id": "c7a15e2a5bf9c2da",
    "type": "ui_gauge",
    "z": "6ed1189c17ed0439",
    "name": "",
    "group": "f3b64a4198b3c46c",
    "order": 19,
    "width": 4,
    "height": 4,
    "gtype": "gage",
    "title": "LOAD CELL 4",
    "label": "KG",
    "format": "{{value}}",
    "min": 0,
    "max": "100",
    "colors": [
        "#00b500",
```



```
        "#e6e600",
        "#ca3838"
    ],
    "seg1": "",
    "seg2": "",
    "className": "",
    "x": 760,
    "y": 1040,
    "wires": []
},
{
    "id": "3cec67f2e3359287",
    "type": "http in",
    "z": "6ed1189c17ed0439",
    "name": "",
    "url": "/sensor",
    "method": "get",
    "upload": false,
    "swaggerDoc": "",
    "x": 230,
    "y": 1080,
    "wires": [
        [
```

```

        "c08f7bb853942b70"
    ]
]
},
{
    "id": "c08f7bb853942b70",
    "type": "function",
    "z": "6ed1189c17ed0439",
    "name": "function 4",
    "func": "msg.payload = { \"dist\": global.get('d'), \"load\":  
global.get('l')}\\nreturn msg;",
    "outputs": 1,
    "noerr": 0,
    "initialize": "",
    "finalize": "",
    "libs": [],
    "x": 460,
    "y": 1080,
    "wires": [
        [
            "07773f295c5a783c"
        ]
    ]
}
]

```

```
},  
  
{  
  "id": "07773f295c5a783c",  
  "type": "http response",  
  "z": "6ed1189c17ed0439",  
  "name": "",  
  "statusCode": "",  
  "headers": {},  
  "x": 670,  
  "y": 1080,  
  "wires": []  
},  
  
{  
  "id": "517648d26c93720d",  
  "type": "ui_spacer",  
  "z": "6ed1189c17ed0439",  
  "name": "spacer",  
  "group": "f3b64a4198b3c46c",  
  "order": 3,  
  "width": 4,  
  "height": 1  
},  
  
{
```

```
"id": "e3086afde0717b7f",  
"type": "ui_spacer",  
"z": "6ed1189c17ed0439",  
"name": "spacer",  
"group": "f3b64a4198b3c46c",  
"order": 6,  
"width": 4,  
"height": 1  
},  
{  
  "id": "329502bdd11bd52a",  
  "type": "ui_spacer",  
  "z": "6ed1189c17ed0439",  
  "name": "spacer",  
  "group": "f3b64a4198b3c46c",  
  "order": 7,  
  "width": 4,  
  "height": 1  
},  
{  
  "id": "7321a3216f223378",  
  "type": "ui_spacer",  
  "z": "6ed1189c17ed0439",
```

```
"name": "spacer",
"group": "f3b64a4198b3c46c",
"order": 8,
"width": 4,
"height": 1
},
{
  "id": "f830dc54889698c4",
  "type": "ui_spacer",
  "z": "6ed1189c17ed0439",
  "name": "spacer",
  "group": "f3b64a4198b3c46c",
  "order": 9,
  "width": 4,
  "height": 1
},
{
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  "name": "spacer",
  "group": "f3b64a4198b3c46c",
  "order": 10,
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"width": 4,  
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  "type": "ui_spacer",  
  "z": "6ed1189c17ed0439",  
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  "order": 11,  
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  "height": 1  
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  "z": "6ed1189c17ed0439",
  "name": "spacer",
  "group": "f3b64a4198b3c46c",
  "order": 13,
  "width": 24,
  "height": 1
},
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  "type": "ui_spacer",
  "z": "6ed1189c17ed0439",
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  "group": "f3b64a4198b3c46c",
  "order": 14,
  "width": 24,
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},
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  "type": "ui_spacer",
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  "order": 17,  
  "width": 4,  
  "height": 1  
},  
{  
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  "type": "ui_spacer",  
  "z": "6ed1189c17ed0439",  
  "name": "spacer",  
  "group": "f3b64a4198b3c46c",  
  "order": 20,  
  "width": 4,  
  "height": 1  
},  
{  
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  "type": "ui_spacer",  
  "z": "6ed1189c17ed0439",  
  "name": "spacer",  
  "group": "f3b64a4198b3c46c",
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"order": 21,  
  "width": 4,  
  "height": 1  
},  
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  "type": "ui_spacer",  
  "z": "6ed1189c17ed0439",  
  "name": "spacer",  
  "group": "f3b64a4198b3c46c",  
  "order": 22,  
  "width": 4,  
  "height": 1  
},  
{  
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  "type": "ui_spacer",  
  "z": "6ed1189c17ed0439",  
  "name": "spacer",  
  "group": "f3b64a4198b3c46c",  
  "order": 23,  
  "width": 4,  
  "height": 1
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},  
  
{  
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  "name": "spacer",  
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  "order": 24,  
  "width": 4,  
  "height": 1  
},  
  
{  
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  "type": "ui_spacer",  
  "z": "6ed1189c17ed0439",  
  "name": "spacer",  
  "group": "f3b64a4198b3c46c",  
  "order": 25,  
  "width": 4,  
  "height": 1  
},  
  
{  
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    "order": 26,
    "width": 4,
    "height": 1
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    "type": "ibmiot",
    "name": "Gogul",
    "keepalive": "60",
    "serverName": "",
    "cleansession": true,
    "appId": "",
    "shared": false
  },
  {
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    "type": "ui_group",
    "name": "control",
    "tab": "2b19469befff9adb",
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    "order": 2,  
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    "width": "24",  
    "collapse": false,  
    "className": ""  
  },  
  {  
    "id": "2b19469befff9adb",  
    "type": "ui_tab",  
    "name": "control",  
    "icon": "control",  
    "disabled": false,  
    "hidden": false  
  }  
]
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