

```
(mydata_server) tsuchiya@macbook ~ % pip install fastapi
Collecting fastapi
  Downloading fastapi-0.70.1-py3-none-any.whl (51 kB)
    |████████████████████████████████████████| 51 kB 1.0 MB/s
Collecting starlette==0.16.0
  Using cached starlette-0.16.0-py3-none-any.whl (61 kB)
Collecting pydantic!=1.7,!>=1.7.1,!>=1.7.2,!>=1.7.3,!>=1.8,!>=1.8.1,<2.0.0,>=1.6.2
  Downloading pydantic-1.9.0-cp39-cp39-macosx_10_9_x86_64.whl (2.9 MB)
    |████████████████████████████████████████| 2.9 MB 3.5 MB/s
Collecting anyio<4,>=3.0.0
  Using cached anyio-3.4.0-py3-none-any.whl (78 kB)
Collecting sniffio>=1.1
  Using cached sniffio-1.2.0-py3-none-any.whl (10 kB)
Collecting idna>=2.8
  Using cached idna-3.3-py3-none-any.whl (61 kB)
Collecting typing-extensions>=3.7.4.3
  Downloading typing_extensions-4.0.1-py3-none-any.whl (22 kB)
Installing collected packages: sniffio, idna, typing-extensions, anyio, starlette, pydantic, fastapi
Successfully installed anyio-3.4.0 fastapi-0.70.1 idna-3.3 pydantic-1.9.0 sniffio-1.2.0 starlette-0.16.0 typing-extensions-4.0.1
(mydata_server) tsuchiya@macbook ~ %
リスト 1
```

```
(mydata_server) tsuchiya@macbook ~ % pip install uvicorn
Collecting uvicorn
  Downloading uvicorn-0.16.0-py3-none-any.whl (54 kB)
    |████████████████████████████████████████| 54 kB 2.6 MB/s
Collecting click>=7.0
  Using cached click-8.0.3-py3-none-any.whl (97 kB)
Collecting h11>=0.8
  Using cached h11-0.12.0-py3-none-any.whl (54 kB)
Collecting asgiref>=3.4.0
  Using cached asgiref-3.4.1-py3-none-any.whl (25 kB)
Installing collected packages: h11, click, asgiref, uvicorn
Successfully installed asgiref-3.4.1 click-8.0.3 h11-0.12.0 uvicorn-0.16.0
(mydata_server) tsuchiya@macbook ~ %
リスト 2
```

```
import uvicorn

from fastapi import FastAPI

app = FastAPI()

@app.get("/")
def read_root():
    return {"Hello": "World"}

@app.get("/items/{item_id}")
def read_item(item_id: int, q: str = None):
    return {"item_id": item_id, "q": q}

if __name__ == "__main__":

    uvicorn.run(app, host="0.0.0.0", port=8000)
リスト 3
```

```
$ mkdir -p ~/CQ/MyDataServer/influxDB
$ cd ~/CQ/MyDataServer/influxDB
$ tar zxvf ../Downloads/influxdb2-2.1.1-darwin-amd64.tar.gz
x influxdb2-2.1.1-darwin-amd64/LICENSE
x influxdb2-2.1.1-darwin-amd64/README.md
x influxdb2-2.1.1-darwin-amd64/influxd
$ ls -l
total 0
drwxr-xr-x  5 tsuchiya  staff  160 12 14 17:46 influxdb2-2.1.1-darwin-amd64
$
リスト 4
```

```
$ tar zxvf ../Downloads/influxdb2-client-2.2.1-darwin-amd64.tar.gz
x influxdb2-client-2.2.1-darwin-amd64/LICENSE
x influxdb2-client-2.2.1-darwin-amd64/README.md
x influxdb2-client-2.2.1-darwin-amd64/influx
$ ls
influxdb2-2.1.1-darwin-amd64          influxdb2-client-2.2.1-darwin-amd64
$ ls -l
total 0
drwxr-xr-x  5 tsuchiya  staff  160 12 14 17:46 influxdb2-2.1.1-darwin-amd64
drwxr-xr-x  5 tsuchiya  staff  160 12 14 17:48 influxdb2-client-2.2.1-darwin-amd64
$
リスト 5
```

```
$ export PATH=$PATH:`pwd`/influxdb2-2.1.1-darwin-amd64
```

```
$ influxd
2022-01-02T15:31:19.496386Z  info  Welcome to InfluxDB {"log_id": "0YnrW3I0000", "version": "2.1.1", "commit": "657e1839de",
"build_date": "2021-11-09T03:03:48Z"}
2022-01-02T15:31:19.565799Z  info  Resources opened    {"log_id": "0YnrW3I0000", "service": "bolt", "path":
"/Users/tsuchiya/.influxdbv2/influxd.bolt"}
2022-01-02T15:31:19.566073Z  info  Resources opened    {"log_id": "0YnrW3I0000", "service": "sqlite", "path":
"/Users/tsuchiya/.influxdbv2/influxd.sqlite"}
2022-01-02T15:31:19.602004Z  info  Bringing up metadata migrations {"log_id": "0YnrW3I0000", "service": "KV migrations",
"migration_count": 18}
2022-01-02T15:31:22.063077Z  info  Bringing up metadata migrations {"log_id": "0YnrW3I0000", "service": "SQL migrations",
"migration_count": 3}
2022-01-02T15:31:22.130755Z  info  Using data dir {"log_id": "0YnrW3I0000", "service": "storage-engine", "service": "store",
"path": "/Users/tsuchiya/.influxdbv2/engine/data"}
2022-01-02T15:31:22.131425Z  info  Compaction settings {"log_id": "0YnrW3I0000", "service": "storage-engine", "service": "store",
"max_concurrent_compactions": 2, "throughput_bytes_per_second": 50331648, "throughput_bytes_per_second_burst": 50331648}
2022-01-02T15:31:22.131467Z  info  Open store (start) {"log_id": "0YnrW3I0000", "service": "storage-engine", "service": "store",
"op_name": "tsdb_open", "op_event": "start"}
2022-01-02T15:31:22.131974Z  info  Open store (end) {"log_id": "0YnrW3I0000", "service": "storage-engine", "service": "store",
"op_name": "tsdb_open", "op_event": "end", "op_elapsed": "0.508ms"}
2022-01-02T15:31:22.132050Z  info  Starting retention policy enforcement service {"log_id": "0YnrW3I0000", "service":
"retention", "check_interval": "30m"}
2022-01-02T15:31:22.132096Z  info  Starting precreation service {"log_id": "0YnrW3I0000", "service": "shard-precreation",
"check_interval": "10m", "advance_period": "30m"}
2022-01-02T15:31:22.132198Z  info  Starting query controller {"log_id": "0YnrW3I0000", "service": "storage-reads",
"concurrency_quota": 1024, "initial_memory_bytes_quota_per_query": 9223372036854775807, "memory_bytes_quota_per_query":
9223372036854775807, "max_memory_bytes": 0, "queue_size": 1024}
2022-01-02T15:31:22.134805Z  info  Configuring InfluxQL statement executor (zeros indicate unlimited). {"log_id":
"0YnrW3I0000", "max_select_point": 0, "max_select_series": 0, "max_select_buckets": 0}
2022-01-02T15:31:22.539698Z  info  Starting {"log_id": "0YnrW3I0000", "service": "telemetry", "interval": "8h"}
2022-01-02T15:31:22.539994Z  info  Listening {"log_id": "0YnrW3I0000", "service": "tcp-listener", "transport": "http", "addr":
":8086", "port": 8086}
リスト 6
```

```
$ influx auth list
```

```
Error: could not find authorization with given parameters: 401 Unauthorized: unauthorized access
```

```
$
```

```
リスト 7
```

```
$ influx config create --config-name MyDataServer --host-url http://localhost:8086 --org MyDataServer --token
```

```
YQakoFDiBFp56STNT6HSmUoanpPOZg9YpdW5evZxpDN067o6A3uoN7EWX-TtLinISRRVIA_EY5ngzFK4ihgJZg== --active
```

```
Active Name URL Org
```

```
* MyDataServer http://localhost:8086 MyDataServer
```

```
$
```

```
リスト 8
```

```
$ influx auth list
```

```
ID Description Token User Name User
```

```
ID Permissions
```

```
089a0f2d394fe000 tsuyo's Token
```

```
YQakoFDiBFp56STNT6HSmUoanpPOZg9YpdW5evZxpDN067o6A3uoN7EWX-TtLinISRRVIA_EY5ngzFK4ihgJZg== tsuyo
```

```
089a0f2cd7cfe000 [read:/authorizations write:/authorizations read:/buckets write:/buckets read:/dashboards write:/dashboards  
read:/orgs write:/orgs read:/sources write:/sources read:/tasks write:/tasks read:/telegrafs write:/telegrafs read:/users write:/users  
read:/variables write:/variables read:/scrapers write:/scrapers read:/secrets write:/secrets read:/labels write:/labels read:/views  
write:/views read:/documents write:/documents read:/notificationRules write:/notificationRules read:/notificationEndpoints  
write:/notificationEndpoints read:/checks write:/checks read:/dbrp write:/dbrp read:/notebooks write:/notebooks read:/annotations  
write:/annotations]
```

```
$ influx user list
```

```
ID Name
```

```
089a0f2cd7cfe000 tsuyo
```

```
$
```

```
リスト 9
```

```
$ cat ~/.influxdbv2/configs
```

```
[MyDataServer]
```

```
url = "http://localhost:8086"
```

```
token = "YQakoFDiBFp56STNT6HSmUoanpPOZg9YpdW5evZxpDN067o6A3uoN7EWX-TtLinISRRVIA_EY5ngzFK4ihgJZg=="
```

```
org = "MyDataServer"
```

```
active = true
```

```
#
```

```
# [eu-central]
```

```
# url = "https://eu-central-1-1.aws.cloud2.influxdata.com"
```

```
# token = "XXX"
```

```
# org = ""
```

```
#
```

```
# [us-central]
```

```
# url = "https://us-central1-1.gcp.cloud2.influxdata.com"
```

```
# token = "XXX"
```

```
# org = ""
```

```
#
```

```
# [us-west]
```

```
# url = "https://us-west-2-1.aws.cloud2.influxdata.com"
```

```
# token = "XXX"
```

```
# org = ""
```

```
$
```

```
リスト 10
```

```
$ date;influx write --bucket data "m l value=1"
2022年1月4日 火曜日 15時06分33秒 JST
$ date;influx write --bucket data "m l value=2"
2022年1月4日 火曜日 15時06分46秒 JST
$
リスト 11
```

```
$ influx query 'from(bucket:"data")|> range(start:-10m)|> filter(fn: (r) => r._measurement == "m l")'
```

```
Result: _result
```

```
Table: keys: [_start, _stop, _field, _measurement]
```

_time:time	_start:time	_stop:time	_field:string	_measurement:string
	_value:float			
2022-01-04T05:57:09.951797000Z	2022-01-04T06:07:09.951797000Z		value	m l
2022-01-04T06:06:33.612930000Z			1	
2022-01-04T05:57:09.951797000Z	2022-01-04T06:07:09.951797000Z		value	m l
2022-01-04T06:06:46.775093000Z			2	

```
$
リスト 12
```