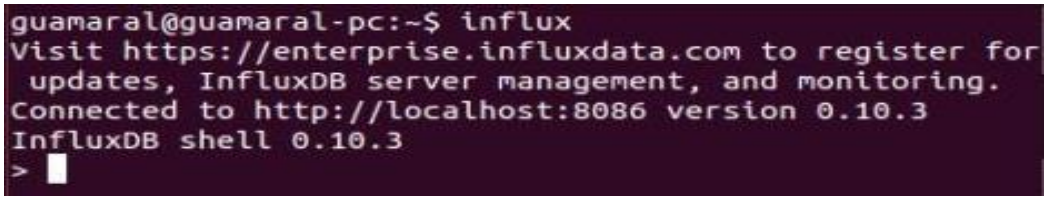
InfluxDB sample queries

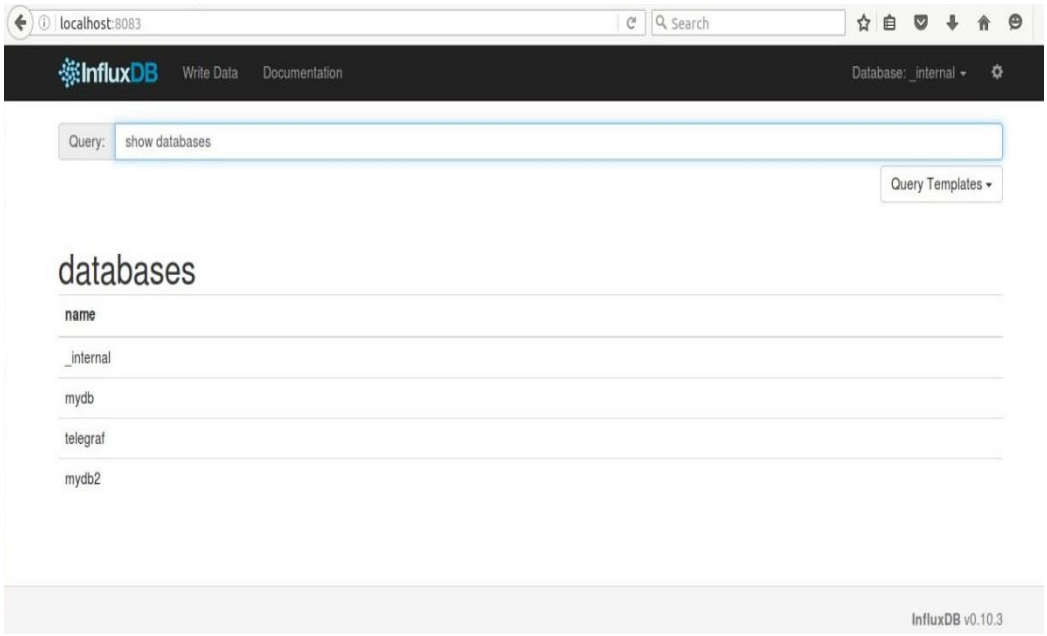
1. **How to connect InfluxDB?**

   We can connect to InfluxDb in a two ways.

   - Using command line interface:



   - admin user interface



2. Creating a database

```
guamaral@guamaral-pc:~$ influx
Visit https://enterprise.influxdata.com to register for updates, InfluxDB server
 management, and monitoring.
Connected to http://localhost:8086 version 0.10.3
InfluxDB shell 0.10.3
> create database mydb
> show databases
name: databases
---------------
name
_internal
telegraf
NOAA_water_database
mydb

> use my db
Could not parse database name from "use my db".
> use mydb
Using database mydb
>
```

3. Writing from command line interface

```
guamaral@guamaral-pc:~$ influx
Visit https://enterprise.influxdata.com to register for updates,
 InfluxDB server management, and monitoring.
Connected to http://localhost:8086 version 0.10.3
InfluxDB shell 0.10.3
> use NOAA_water_database
Using database NOAA_water_database
> insert h2o_quality,location=coyote_creek,randtag=1 index=200 1
4340555620000000000
> select * from h2o_quality where index=200
name: h2o_quality
-----------------
time                    index   location        randtag
14340555620000000000    200     coyote_creek    1

>
```

4. Writing data using http-api

```
guamaral@guamaral-pc:~$ curl -i -XPOST 'http://localhost:8086/write?db=NOAA
_water_database' --data-binary 'h2o_quality,location=santa_monica,randtag=3
 index=201 1434055562000000000'
HTTP/1.1 204 No Content
Request-Id: 5c30a1a0-fcb0-11e5-8198-000000000000
X-Influxdb-Version: 0.10.3
Date: Thu, 07 Apr 2016 11:03:29 GMT

guamaral@guamaral-pc:~$ influx
Visit https://enterprise.influxdata.com to register for updates, InfluxDB s
erver management, and monitoring.
Connected to http://localhost:8086 version 0.10.3
InfluxDB shell 0.10.3
> use NOAA_water_database
Using database NOAA_water_database
> select * from h2o_quality where index=201
name: h2o_quality
-----------------
time                    index   location        randtag
1434055562000000000     201     santa_monica    3

>
```

4. Quering data using http-api

```
guamaral@guamaral-pc:~$ curl -G 'http://localhost:8086/query?pretty=true' -
-data-urlencode "db=NOAA_water_database" --data-urlencode "q=SELECT * FROM
h2o_quality WHERE location='coyote_creek' limit 2"
{
    "results": [
        {
            "series": [
                {
                    "name": "h2o_quality",
                    "columns": [
                        "time",
                        "index",
                        "location",
                        "randtag"
                    ],
                    "values": [
                        [
                            "2015-06-11T20:46:02Z",
                            200,
                            "coyote_creek",
                            "1"
                        ],
                        [
                            "2015-08-18T00:00:00Z",
                            41,
                            "coyote_creek",
                            "1"
                        ]
                    ]
                }
            ]
        }
    ]
guamaral@guamaral-pc:~$
```

5. Continuous query:

```
guamaral@guamaral-pc:~$ influx
Visit https://enterprise.influxdata.com to register for updates, InfluxDB server man
agement, and monitoring.
Connected to http://localhost:8086 version 0.10.3
InfluxDB shell 0.10.3
> use telegraf
Using database telegraf
> CREATE CONTINUOUS QUERY mean_memory ON telegraf RESAMPLE EVERY 1m BEGIN SELECT med
ian(buffered) as buffered_median, mean(free) as free_mean INTO mem_copy FROM mem GRO
UP BY time(2m) END
> show continuous queries
name: _internal
---------------
name    query


name: telegraf
--------------
name            query
mean_memory     CREATE CONTINUOUS QUERY mean_memory ON telegraf RESAMPLE EVERY 1m BE
GIN SELECT median(buffered) AS buffered_median, mean(free) AS free_mean INTO telegra
f."default".mem_copy FROM telegraf."default".mem GROUP BY time(2m) END


name: NOAA_water_database
-------------------------
name    query

> select * from mem_copy
name: mem_copy
--------------
time                    buffered_median free_mean
1460068320000000000     7.8901248e+07   4.179298986666667e+08
```

6. Retention policy:

```
guamaral@guamaral-pc:~$ influx
Visit https://enterprise.influxdata.com to register for updates, InfluxDB server management, and monitoring.
Connected to http://localhost:8086 version 0.10.3
InfluxDB shell 0.10.3
> use telegraf
Using database telegraf
> CREATE RETENTION POLICY one_day ON telegraf DURATION 1d REPLICATION 1 DEFAULT
> show retention policies on telegraf
name            duration        replicaN        default
default         0               1               false
two_day         48h0m0s         1               false
three_day       72h0m0s         1               false
one_day         24h0m0s         1               true
```