

## 1. Run TDengine

```
hameln@ubuntu:~$ taos

Welcome to the TDengine shell from Linux, Client Version:2.6.0.6
Copyright (c) 2022 by TAOS Data, Inc. All rights reserved.
```

## 2. Create database

```
taos> CREATE DATABASE Logistics KEEP 365 DAYS 7 BLOCKS 6 UPDATE 1;
Query OK, 0 of 0 row(s) in database (0.001645s)
```

## 3. Change database

```
taos> USE Logistics;
Database changed.
```

## 4. Create table named "tracking"

```
taos> CREATE TABLE tracking (ts TIMESTAMP, ID BINARY(50), location NCHAR(20), courier_ID BINARY(20));
Query OK, 0 of 0 row(s) in database (0.004751s)
```

## 5. Insert value

```
taos> INSERT INTO tracking VALUES ('2022-06-03 22:29:00','SF1358657998590','ShangHai','2003212');
Query OK, 1 of 1 row(s) in database (0.001000s)

taos> INSERT INTO tracking VALUES ('2022-06-04 13:30:00','SF1358657998590','NanJing','2003212');
Query OK, 1 of 1 row(s) in database (0.000609s)

taos> INSERT INTO tracking VALUES ('2022-06-06 07:46:00','SF1358657998590','HeFei','2003212');
Query OK, 1 of 1 row(s) in database (0.000552s)

taos> INSERT INTO tracking VALUES ('2022-06-07 14:14:00','SF1358657998590','WuHan','2003212');
Query OK, 1 of 1 row(s) in database (0.000378s)

taos> INSERT INTO tracking VALUES ('2022-06-08 11:42:00','SF1358657998590','ChongQing','2003212');
Query OK, 1 of 1 row(s) in database (0.000610s)

taos> INSERT INTO tracking VALUES ('2022-06-09 12:00:00','SF1358657998590','ChengDu','2003212');
Query OK, 1 of 1 row(s) in database (0.000559s)
```

```
taos> INSERT INTO tracking VALUES ('2022-07-01 06:42:00','YT6479538750643','TianJin','2984225');
Query OK, 1 of 1 row(s) in database (0.000539s)

taos> INSERT INTO tracking VALUES ('2022-07-02 14:32:00','YT6479538750643','ShiJiaZhuang','2984225');
Query OK, 1 of 1 row(s) in database (0.000357s)

taos> INSERT INTO tracking VALUES ('2022-07-02 23:40:00','YT6479538750643','TaiYuan','2984225');
Query OK, 1 of 1 row(s) in database (0.000529s)

taos> INSERT INTO tracking VALUES ('2022-07-03 20:17:00','YT6479538750643','XiAn','2984225');
Query OK, 1 of 1 row(s) in database (0.000549s)

taos> INSERT INTO tracking VALUES ('2022-07-04 17:46:00','YT6479538750643','ChengDu','2984225');
Query OK, 1 of 1 row(s) in database (0.000379s)
```

## 6. Display the table

```
taos> SELECT * FROM tracking;
-----
ts              | id              | location      | courier_id      |
-----
2022-06-03 22:29:00.000 | SF1358657998590 | ShangHai      | 2003212         |
2022-06-04 13:30:00.000 | SF1358657998590 | NanJing       | 2003212         |
2022-06-06 07:46:00.000 | SF1358657998590 | HeFei         | 2003212         |
2022-06-07 14:14:00.000 | SF1358657998590 | WuHan         | 2003212         |
2022-06-08 11:42:00.000 | SF1358657998590 | ChongQing     | 2003212         |
2022-06-09 12:00:00.000 | SF1358657998590 | ChengDu       | 2003212         |
2022-07-01 06:42:00.000 | YT6479538750643 | TianJin       | 2984225         |
2022-07-02 14:32:00.000 | YT6479538750643 | ShiJiaZhuang  | 2984225         |
2022-07-02 23:40:00.000 | YT6479538750643 | TaiYuan       | 2984225         |
2022-07-03 20:17:00.000 | YT6479538750643 | XiAn          | 2984225         |
2022-07-04 17:46:00.000 | YT6479538750643 | ChengDu       | 2984225         |
Query OK, 11 row(s) in set (0.001853s)
```

- Create table named couriers (This table shows the information of the couriers from one station(like the station in Shang Hai) who got a particular shipment at a particular time )

```
taos> CREATE TABLE couriers (ts TIMESTAMP, courier_id BINARY(50), courier_name BINARY(20), logistic_id BINARY(20), phone BINARY(11));
Query OK, 0 of 0 row(s) in database (0.002407s)
```

## 8. Insert value

```
taos> INSERT INTO couriers VALUES ('2022-06-03 22:27:00','2003212','WuGang','SF2354176543224','18173343623');
Query OK, 1 of 1 row(s) in database (0.000636s)

taos> INSERT INTO couriers VALUES ('2022-06-03 22:27:30','2003212','WuGang','SF1968176452624','18173343623');
Query OK, 1 of 1 row(s) in database (0.000517s)

taos> INSERT INTO couriers VALUES ('2022-06-03 22:28:00','2003212','WuGang','SF1968184736444','18173343623');
Query OK, 1 of 1 row(s) in database (0.000419s)

taos> INSERT INTO couriers VALUES ('2022-06-03 22:29:00','2003212','WuGang','SF1358657998590','18173343623');
Query OK, 1 of 1 row(s) in database (0.000432s)

taos> INSERT INTO couriers VALUES ('2022-06-03 22:28:30','2113212','LiHua','SF1358639675590','13746574998');
Query OK, 1 of 1 row(s) in database (0.000611s)

taos> INSERT INTO couriers VALUES ('2022-06-03 22:27:30','2113212','LiHua','SF1228733452590','13746574998');
Query OK, 1 of 1 row(s) in database (0.000298s)
```

## 9. Display the table

```
taos> SELECT * FROM couriers;
-----
ts              | courier_id      | courier_name   | logistic_id      | phone          |
-----
2022-06-03 22:27:00.000 | 2003212         | WuGang         | SF2354176543224 | 18173343623   |
2022-06-03 22:27:30.000 | 2113212         | LiHua          | SF1228733452590 | 13746574998   |
2022-06-03 22:28:00.000 | 2003212         | WuGang         | SF1968184736444 | 18173343623   |
2022-06-03 22:28:30.000 | 2113212         | LiHua          | SF1358639675590 | 13746574998   |
2022-06-03 22:29:00.000 | 2003212         | WuGang         | SF1358657998590 | 18173343623   |
Query OK, 5 row(s) in set (0.001432s)
```

10. Display the data from tracking whose time is between 2022-06-07 00:00:00 and 2022-07-02 00:00:00

```
taos> SELECT * FROM tracking WHERE ts >= '2022-06-07' AND ts <= '2022-07-02';
```

ts	id	location	courier_id
2022-06-07 14:14:00.000	SF1358657998590	WuHan	2003212
2022-06-08 11:42:00.000	SF1358657998590	ChongQing	2003212
2022-06-09 12:00:00.000	SF1358657998590	ChengDu	2003212
2022-07-01 06:42:00.000	YT6479538750643	TianJin	2984225

Query OK, 4 row(s) in set (0.001693s)

11. Display the data from tracking whose time is between 2022-06-07 00:00:00 and 2022-07-02 00:00:00 and company is ShunFeng,

```
taos> SELECT * FROM tracking WHERE ts >= '2022-06-07' AND ts <= '2022-07-02' AND id LIKE 'SF%';
```

ts	id	location	courier_id
2022-06-07 14:14:00.000	SF1358657998590	WuHan	2003212
2022-06-08 11:42:00.000	SF1358657998590	ChongQing	2003212
2022-06-09 12:00:00.000	SF1358657998590	ChengDu	2003212

Query OK, 3 row(s) in set (0.001956s)

12. Display the data whose time in these two tables are the same

```
taos> SELECT * FROM tracking,couriers WHERE tracking.ts = couriers.ts;
```

ts	courier_name	logistic_id	phone	location	courier_id	ts	courier_id
2022-06-03 22:29:00.000	WuGang	SF1358657998590	18173343623	ShangHai	2003212	2022-06-03 22:29:00.000	2003212

Query OK, 1 row(s) in set (0.006611s)