

1. HyperLogLog

HyperLogLog is a **probabilistic data structure** used to estimate the **cardinality** (the number of distinct elements) in a very large dataset, using **tiny, fixed memory**.

How to use HyperLogLog to count page UVs?

To use the HyperLogLog statistics page UV, you mainly need to use the following two commands:

- `PFADD key element1 element2 ...` : Add one or more elements to HyperLogLog.
- `PFCOUNT key1 key2` : Get the unique count of one or more HyperLogLogs.

1. Add each user ID that visits the specified page HyperLogLog to .

```
1 PFADD PAGE_1:UV USER1 USER2 ..... USERn
```

bash

2. Count the UVs of the specified page.

```
1 PFCOUNT PAGE_1:UV
```

bash