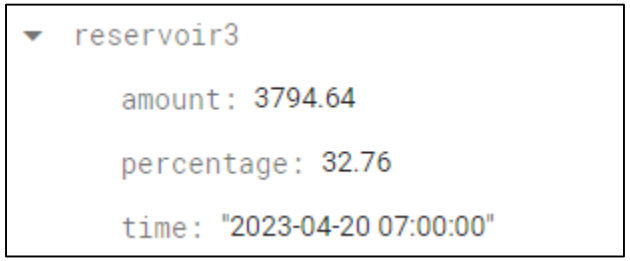
reservoir

- 一次 update 一筆水庫的資料
- Example:

```python
def update_reservoir(id, amount, percentage, time):
    key = 'reservoir' + str(id)
    dic = {
        key: {
            'amount': amount,
            'percentage': percentage,
            'time': time
        }
    }
    collection_reservoir.document('last').update(dic)
```

```python
update_reservoir(3, 3794.64, 32.76, '2023-04-20 07:00:00')
```



electricity

- update_region: 一次 update 一個區域的資料
- Example:

```
update_region('all', 3157.8, 3598, 3157.8, 1361, 23202673)
```


```
def update_region(region, avg_usage_per_person, estimated_supply, real_time_generation, real_time_usage, supplied_population):
    key = 'region.' + region
    dic = {
        key: {
            'avg_usage_per_person': avg_usage_per_person,
            'estimated_supply': estimated_supply,
            'real_time_generation': real_time_generation,
            'real_time_usage': real_time_usage,
            'supplied_population': supplied_population
        }
    }
    collection_electricity.document('last').update(dic)
```

electricity

- Example:

```python
def update_storage_rate(storage_rate):
    dic = {'storage_rate': storage_rate}
    collection_electricity.document('last').update(dic)


def update_time(update_time):
    dic = {'update_time': update_time}
    collection_electricity.document('last').update(dic)
```

```python
update_storage_rate(11.05)
update_time('112.04.21(五)14:10')
```

```
storage_rate: 11.05

update_time: "112.04.21(五)14:10"
```

earthquake

- Document: 0-9 , 0 為最新的一筆資料
- 每次更新會把原本的資料往下推 (id +1)
- 最多到 9, id 超過 9 → 不再紀錄
- 因避免 input argument 太多, 直接 input dictionary
- Example: 下頁

```
'''
dic = {
    'each_location': {
        'south': {'PGA': '0', 'PGV': '0'},
        'middle': {'PGA': '0', 'PGV': '0'},
        'north': {'PGA': '0', 'PGV': '0'}
    },
    'time': '2023-04-20 7:00:00',
    'scale': '4',
    'depth': '5km',
    'magnitude': '6.3',
    'geopoint': '北緯,東經',
    'location': '東北方'
}
'''
```

```
def update_earthquake(dic):
    for doc in docs:
        new_id = int(doc.id) + 1
        if new_id <= 9:
            collection_earthquake.document(str(new_id)).set(doc.to_dict())
        else:
            continue
    collection_earthquake.document('0').set(dic)
```

earthquake

```python
dic = {
    'each_location': {
        'south': {'PGA': '0', 'PGV': '0'},
        'middle': {'PGA': '0', 'PGV': '0'},
        'north': {'PGA': '0', 'PGV': '0'}
    },
    'time': '2023-04-20 7:00:00',
    'scale': '4',
    'depth': '最新資料',
    'magnitude': '6.3',
    'geopoint': '北緯,東經',
    'location': '東北方'
}

update_earthquake(dic)
```