```python
import pandas as pd
```

```python
location=pd.Series(["sample01","sample02","sample03",
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"sample395",
"sample396",
"sample397",
"sample398",
"sample399",
"sample400"
])
location
```

Out[9]:
```
0        sample01
1        sample02
2        sample03
3        sample04
4        sample05
           ...
394    sample396
395    sample397
396    sample398
397    sample399
398    sample400
Length: 399, dtype: object
```

In [4]:
```
temperature=pd.Series([25.5,24.5,23.5,34.5,22.5,22.6,25.6,28.6,29.9,24.6
temperature
```

Out[4]:
```
0        25.5
1        24.5
2        23.5
3        34.5
4        22.5
         ...
394      24.5
395      23.5
396      27.8
397      29.9
398      23.0
Length: 399, dtype: float64
```

In [5]: ▶|
```python
pH=pd.Series([7.2,2.5,4.8,7.3,6.8,7.6,6.7,6.7,7.5,7.7,7.8,3.6,2.5,2.8,8.
pH
```

Out[5]:
```
0        7.2
1        2.5
2        4.8
3        7.3
4        6.8
        ...
394      5.7
395      8.3
396      7.2
397      2.5
398      4.8
Length: 399, dtype: float64
```

In [6]: ▶|
```python
acceptablerange=pd.Series(["5-8","18-25","5","12-15","15-25","8-10","11-
acceptablerange
```

Out[6]:
```
0          5-8
1        18-25
2            5
3        12-15
4        15-25
         ...
394      21-25
395        4-9
396       7-10
397        2-9
398        3-9
Length: 399, dtype: object
```

In [7]: ▶|
```python
status=pd.Series(["ok","ok","ok","no","ok","ok","ok","ok","ok","ok","ok"
status
```

Out[7]:
```
0         ok
1         ok
2         ok
3         no
4         ok
         ..
394       ok
395       ok
396       ok
397       ok
398       ok
Length: 399, dtype: object
```

```
In [8]:    import pandas as pd
           water_management=pd.DataFrame({"location":location,"temperature":tempera
           water_management

           water_management.to_csv('water_management',index=False)
```

```
In [10]:   water_management=pd.DataFrame({"location":location,"temperature":tempera
           water_management
```

Out[10]:

	location	temperature	pH	acceptablerange	status
0	sample01	25.5	7.2	5-8	ok
1	sample02	24.5	2.5	18-25	ok
2	sample03	23.5	4.8	5	ok
3	sample04	34.5	7.3	12-15	no
4	sample05	22.5	6.8	15-25	ok
...	...	...	...	...	...
394	sample396	24.5	5.7	21-25	ok
395	sample397	23.5	8.3	4-9	ok
396	sample398	27.8	7.2	7-10	ok
397	sample399	29.9	2.5	2-9	ok
398	sample400	23.0	4.8	3-9	ok

399 rows × 5 columns

```
In [ ]:
```

```
In [ ]:
```

```
In [ ]:
```