In [1]:

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
from matplotlib import font_manager,rc

```

In [7]:

```
plt.rc("font", family="Malgun Gothic")

corona=pd.read_csv("대구광역시_코로나19 일일검사자_20211030.csv",encoding
corona.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 617 entries, 0 to 616
Data columns (total 3 columns):
 #   Column  Non-Null Count  Dtype 
---  ------  --------------  ----- 
 0   일자      617 non-null    object
 1   검사건수    617 non-null    int64 
 2   기준      617 non-null    object
dtypes: int64(1), object(2)
memory usage: 14.6+ KB
```

In [9]:

```
corona['검사건수'].value_counts()
```

```
364     3
570     2
404     2
1020    2
142     2
       ..
326     1
349     1
251     1
293     1
7389    1
Name: 검사건수, Length: 587, dtype: int64
```

In [10]:

```
corona.describe()
```

	검사건수
count	617.000000
mean	3895.113452
std	3788.394190
min	64.000000
25%	574.000000
50%	2268.000000
75%	6706.000000
max	17589.000000

In [22]:

```
print(corona['검사건수'].mean())
print(corona['검사건수'].min())
print(corona['검사건수'].max())
print(corona['검사건수'].std())
```

```
3895.1134521880067
64
17589
3788.394189601844
```

In [32]:

```
result = corona['검사건수'].agg(['mean','min','max','std'])
result
```

```
mean    3895.113452
min       64.000000
max    17589.000000
std     3788.394190
Name: 검사건수, dtype: float64
```

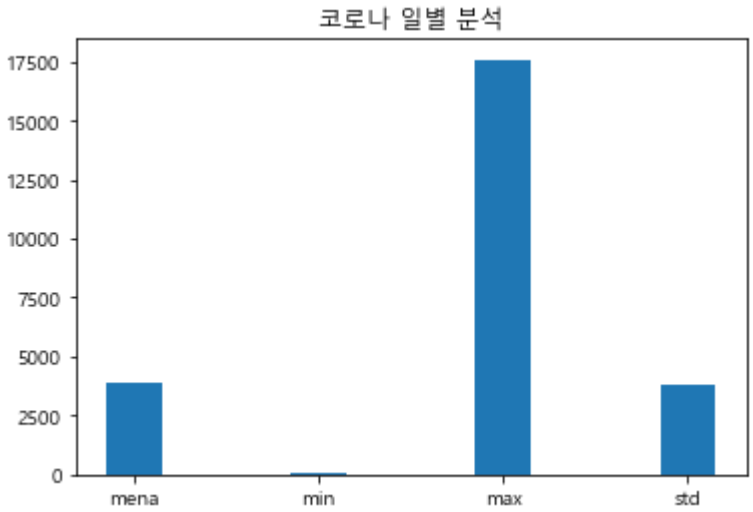
In [41]:

```
result.index.tolist()
```

```
['mean', 'min', 'max', 'std']
```

In [52]:

```
data=[corona['검사건수'].mean(),
      corona['검사건수'].min(),
      corona['검사건수'].max(),
      corona['검사건수'].std()]
x = ['mena','min','max','std']
plt.bar(x,data,width=0.3)
plt.title('코로나 일별 분석')
plt.show()
```



In [55]:

```
corona['일자']=pd.to_datetime(corona['일자'], format='%Y-%m-%d')
```

In [66]:

```
MON =corona.query('일자.dt.dayofweek == 0').mean()
TUE =corona.query('일자.dt.dayofweek == 1').mean()
WED =corona.query('일자.dt.dayofweek == 2').mean()
THU =corona.query('일자.dt.dayofweek == 3').mean()
FRI =corona.query('일자.dt.dayofweek == 4').mean()
SAT =corona.query('일자.dt.dayofweek == 5').mean()
SUN =corona.query('일자.dt.dayofweek == 6').mean()

data1=[MON,TUE,WED,THU,FRI,SAT,SUN]
x1 = ['MON','TUE','WED','THU','FRI','SAT','SUN']
plt.bar(x1,data1,width=0.3)
plt.title('코로나 요일별 평균')
plt.show()

```

```
  SUN =corona.query('일자.dt.dayofweek == 6').mean()
```

In [ ]:

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In [68]:

```
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2 data1=[MON,TUE,WED,THU,FRI,SAT,SUN]
3 x1 = ['MON','TUE','WED','THU','FRI','SAT','SUN']
4 plt.bar(x1,data1,width=0.3)
5 plt.title('코로나 요일별 평균')
6 plt.show()
7
```
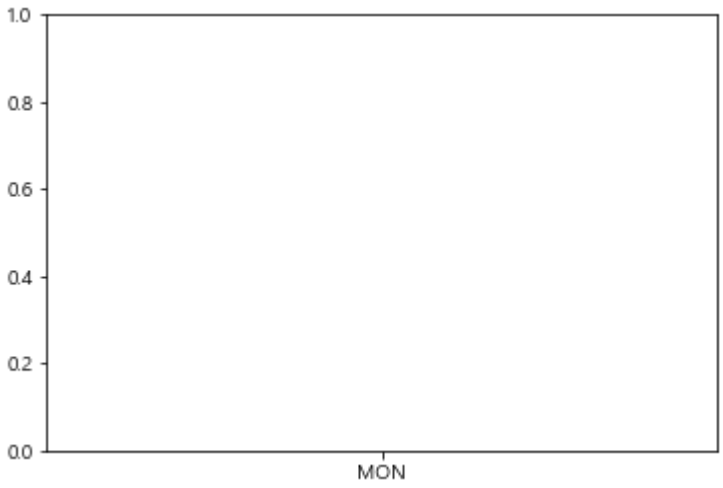

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
~\AppData\Local\Temp/ipykernel_4568/1570763539.py in <module>
      1 data1=[MON,TUE,WED,THU,FRI,SAT,SUN]
      2 x1 = ['MON','TUE','WED','THU','FRI','SAT','SUN']
----> 3 plt.bar(x1,data1,width=0.3)
      4 plt.title('코로나 요일별 평균')
      5 plt.show()

~\anaconda3\lib\site-packages\matplotlib\pyplot.py in bar(x, height, width, bottom, a
s)
   2649         x, height, width=0.8, bottom=None, *, align='center',
   2650         data=None, **kwargs):
-> 2651     return gca().bar(
   2652         x, height, width=width, bottom=bottom, align=align,
   2653         **({"data": data} if data is not None else {}), **kwargs)

~\anaconda3\lib\site-packages\matplotlib\__init__.py in inner(ax, data, *args, **kwar
   1359     def inner(ax, *args, data=None, **kwargs):
   1360         if data is None:
-> 1361             return func(ax, *map(sanitize_sequence, args), **kwargs)
   1362
   1363         bound = new_sig.bind(ax, *args, **kwargs)

~\anaconda3\lib\site-packages\matplotlib\axes\_axes.py in bar(self, x, height, width,
wargs)
   2355                    hatch)
   2356         for l, b, w, h, c, e, lw, htch in args:
-> 2357             r = mpatches.Rectangle(
   2358                 xy=(l, b), width=w, height=h,
   2359                 facecolor=c,

~\anaconda3\lib\site-packages\matplotlib\patches.py in __init__(self, xy, width, heigl
s)
    750             %(Patch_kwdoc)s
    751         """
--> 752         super().__init__(**kwargs)
    753         self._x0 = xy[0]
    754         self._y0 = xy[1]
```

```
~\anaconda3\lib\site-packages\matplotlib\patches.py in __init__(self, edgecolor, face
idth, linestyle, antialiased, hatch, fill, capstyle, joinstyle, **kwargs)
     99         self.set_fill(fill)
    100         self.set_linestyle(linestyle)
--> 101         self.set_linewidth(linewidth)
    102         self.set_antialiased(antialiased)
    103         self.set_hatch(hatch)

~\anaconda3\lib\site-packages\matplotlib\patches.py in set_linewidth(self, w)
    404                 w = mpl.rcParams['axes.linewidth']
    405
--> 406         self._linewidth = float(w)
    407         # scale the dash pattern by the linewidth
    408         offset, ls = self._us_dashes

TypeError: only size-1 arrays can be converted to Python scalars
```



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