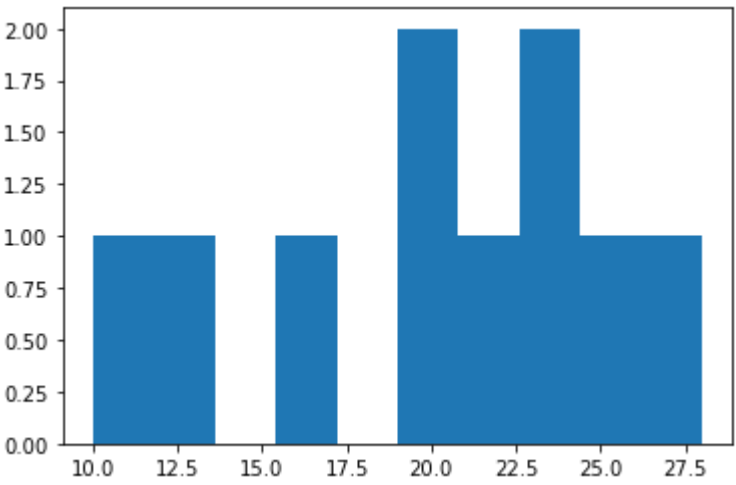


```
In [2]: import string
dict1={}
with open("numbers.txt", "r") as f:
    text = f.read()
    words = text.split()
    table=str.maketrans("", "", string.punctuation)
    stripped = [w.translate(table)for w in words]
for line in stripped:
    for num in line:
        if num in dict1:
            dict1[num]=dict1[num]+1
        else:
            dict1[num]=1;

dict1
```

```
Out[2]: {'2': 19,
'4': 22,
'6': 26,
'8': 13,
'5': 10,
'1': 28,
'9': 24,
'0': 23,
'7': 17,
'3': 20}
```

```
In [4]: import matplotlib.pyplot as plt
plt.hist(dict1.values())
plt.show()
```



```
In [5]: import json
with open('frequency.json','w') as f:
    json.dump(dict1,f)
```

```
In [7]: import pandas as pd
data=pd.read_csv("C:\\Users\\HP\\Downloads\\01-Jan-2019_to_06-Nov-2022.csv")
```

```
In [8]: data=data.fillna(0)
```

```
In [9]: data.shape
```

```
Out[9]: (26, 36)
```

```
In [10]: data["Item Total"] = data["Item Total"].str.replace('$','').astype(float)

C:\Users\HP\AppData\Local\Temp\ipykernel_23940\2259718141.py:1: FutureWarning: The default value of regex will change from True to False in a future version.
In addition, single character regular expressions will *not* be treated as literal strings when regex=True.
  data["Item Total"] = data["Item Total"].str.replace('$','').astype(float)
```

```
In [11]: data["Item Total"].sum()
```

```
Out[11]: 1737.2499999999998
```

```
In [12]: data["Item Total"].mean()
```

```
Out[12]: 66.81730769230768
```

```
In [13]: data["Item Total"].max()
```

```
Out[13]: 243.79
```

```
In [14]: data["Item Total"].min()
```

```
Out[14]: 11.66
```

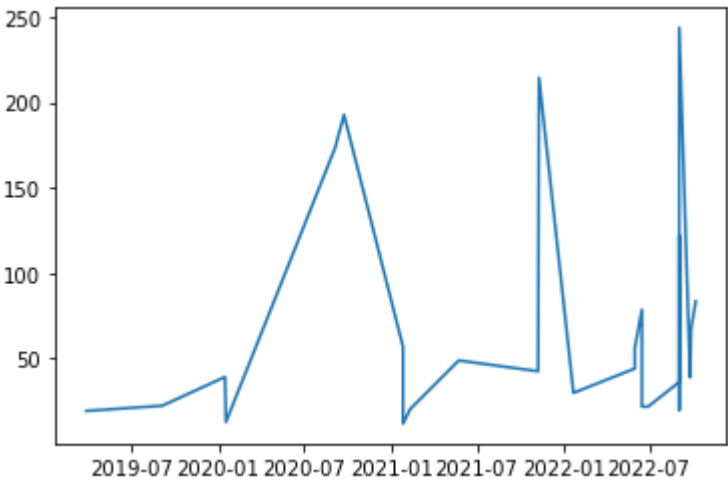
```
In [15]: import statistics as stat
stat.stdev(data["Item Total"])
```

```
Out[15]: 66.31732139088201
```

```
In [16]: data["Order Date"] = pd.to_datetime(data["Order Date"])
```

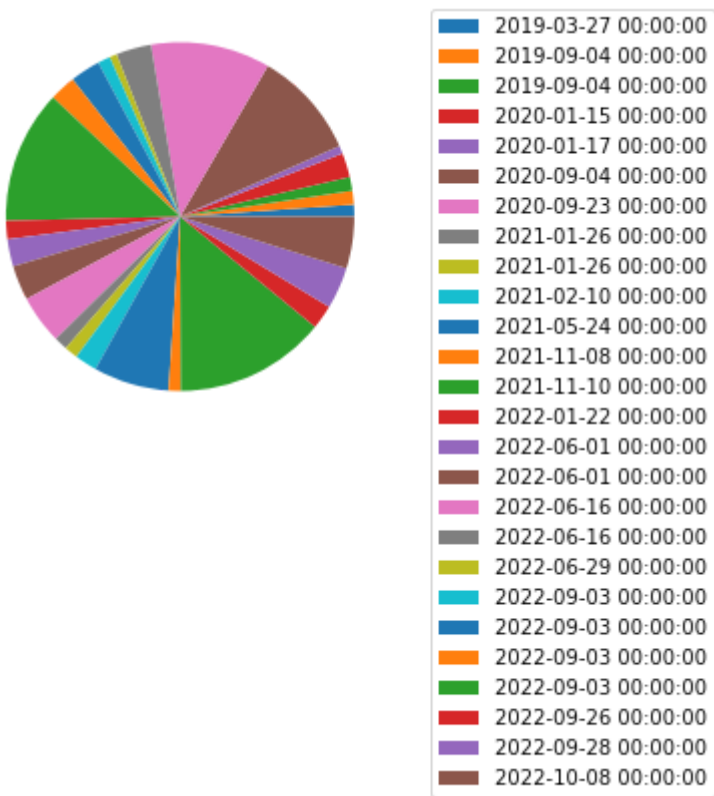
```
In [17]: import matplotlib.pyplot as plt
import numpy as np
x= data["Order Date"]
y= data["Item Total"]
plt.plot(x,y)
plt.show
```

```
Out[17]: <function matplotlib.pyplot.show(close=None, block=None)>
```



```
In [18]: import matplotlib.pyplot as plt
plt.pie(data["Item Total"])
plt.legend(data["Order Date"], bbox_to_anchor=(1.05, 1.0),loc = 'upper left')
plt.show
```

```
Out[18]: <function matplotlib.pyplot.show(close=None, block=None)>
```



```
In [19]: data["Item Subtotal Tax"] = data["Item Subtotal Tax"].str.replace('$','').astype(float)

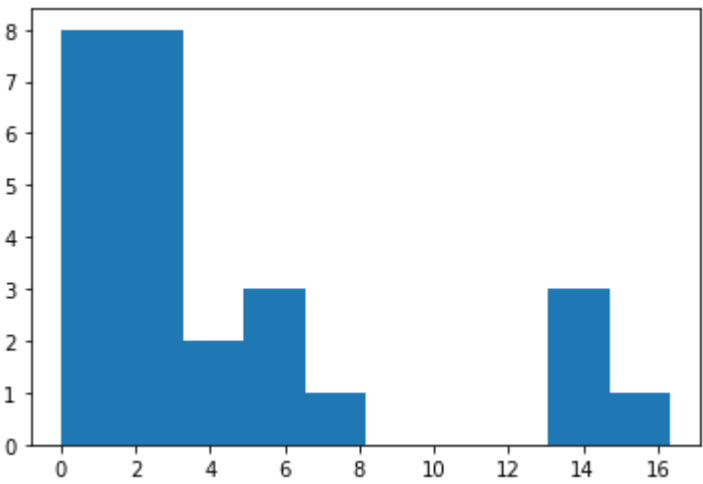
C:\Users\HP\AppData\Local\Temp\ipykernel_23940\134126073.py:1: FutureWarning: The default value of regex will change from True to False in a future version.
In addition, single character regular expressions will *not* be treated as literal strings when regex=True.
  data["Item Subtotal Tax"] = data["Item Subtotal Tax"].str.replace('$','').astype(float)
```

```
In [20]: stat.stdev(data["Item Subtotal Tax"])
```

```
Out[20]: 4.8309991322069825
```

```
In [23]: plt.hist(data["Item Subtotal Tax"])
```

```
Out[23]: (array([8.,  8.,  2.,  3.,  1.,  0.,  0.,  0.,  3.,  1.]),
array([ 0.    ,  1.634,  3.268,  4.902,  6.536,  8.17   ,  9.804, 11.438,
        13.072, 14.706, 16.34 ]),
<BarContainer object of 10 artists>)
```



```
In [ ]:
```