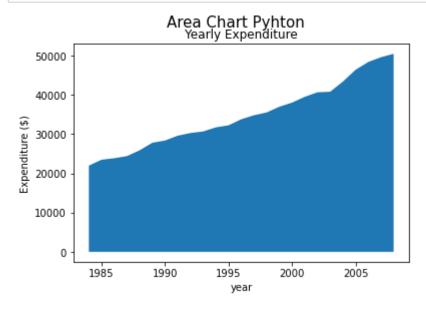
```
In [1]: import pandas as pd
        !pip install squarify
        import matplotlib.pyplot as plt
        import squarify
        Requirement already satisfied: squarify in c:\users\aarme\anaconda3\lib\site-packages (0.4.3)
In [2]: expend = pd.read_table('expenditures.txt', sep= '\t')
        expend.head()
Out[2]:
                         category expenditure sex
            vear
         0 2008
                            Food
                                       6443
                                              1
         1 2008 Alcoholic Beverages
                                        444
         2 2008
                          Housing
                                      17109
                                              1
         3 2008
                          Apparel
                                       1801
                                              1
         4 2008
                     Transportation
                                       8604
                                              1
In [3]: import plotly.express as px
        fig = px.treemap(expend, path= ['year', 'category'], values= 'expenditure', title = 'Tree Map in Python<br><sup>
        fig.show()
```

In [12]:

expend2 = expend.groupby('year').sum()

```
In [69]: plt.fill_between(expend2.index, expend2['expenditure'])
    plt.suptitle('Area Chart Pyhton', size=15)
    plt.title('Yearly Expenditure')
    plt.ylabel('Expenditure ($)')
    plt.xlabel('year');
```



```
In [68]: expend3 = expend.pivot(index= 'year', columns= 'category').drop('sex', axis=1)
    plt.stackplot(expend3.index, [expend3['expenditure'][col] for col in expend3['expenditure']], labels= expend3['expend(bbox_to_anchor= (1,1.03), loc = 'upper left', title= 'Categories')
    plt.suptitle('Stacked Area Chart Pyhton', size=15)
    plt.title('Yearly Expenditure by Category')
    plt.ylabel('Expenditure ($)')
    plt.xlabel('year');
```

