

basic_plot

July 30, 2021

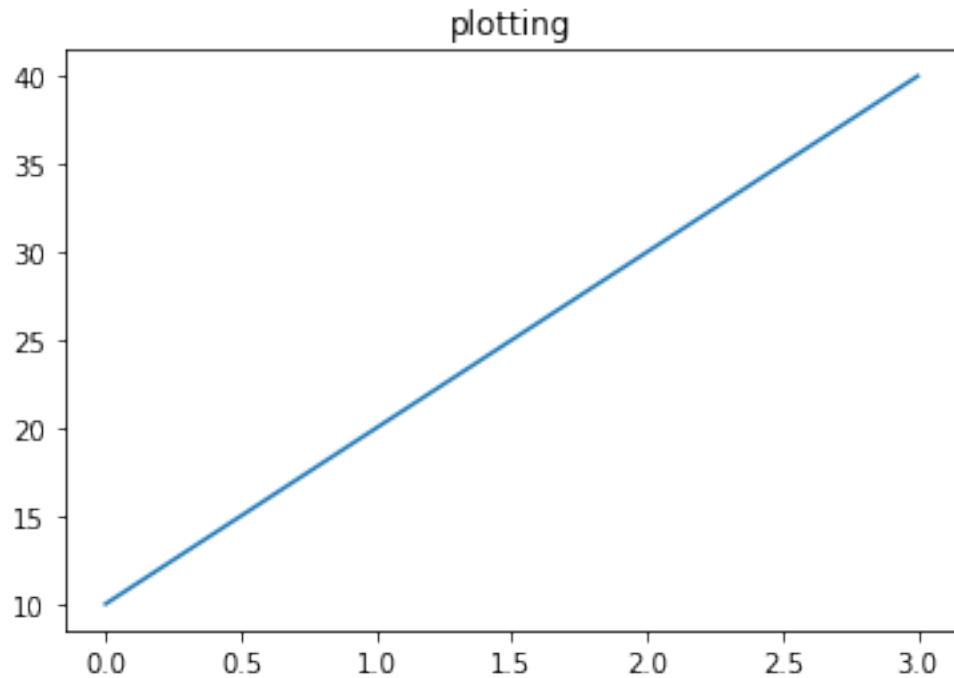
```
[14]: import matplotlib.pyplot as plt
```

```
[15]: import random
```

```
[ ]: from modu.template import ChangedTemperaturesOnMyBirthday  
     from modu.template.basic_hist import highest_temperature
```

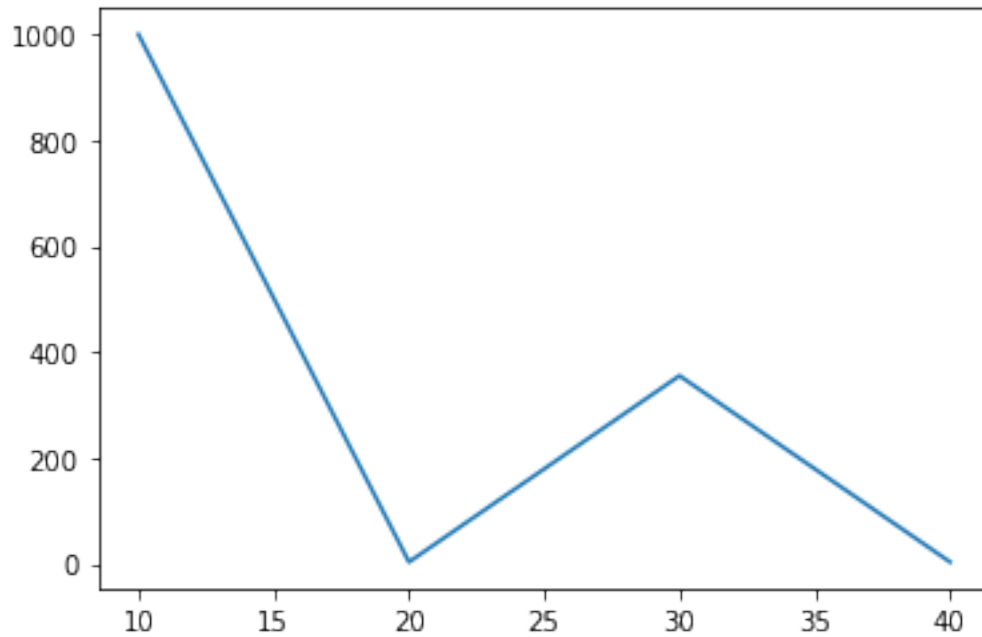
```
[2]: def plot_show():  
     plt.title("plotting")  
     plt.plot([10,20,30,40])  
     plt.show()
```

```
[3]: plot_show()
```



```
[4]: def plot_two_list_show():  
      plt.plot([10, 20, 30, 40],[1000, 3 ,355, 3])  
      plt.show()
```

```
[7]: plot_two_list_show()
```



```
[ ]: def plot_label():  
      plt.title("plotting")  
      plt.plot([10, 20, 30, 40], label='asc')  
      plt.plot([40, 30, 10, 10], label='desc')  
      plt.legend()  
      plt.show()
```

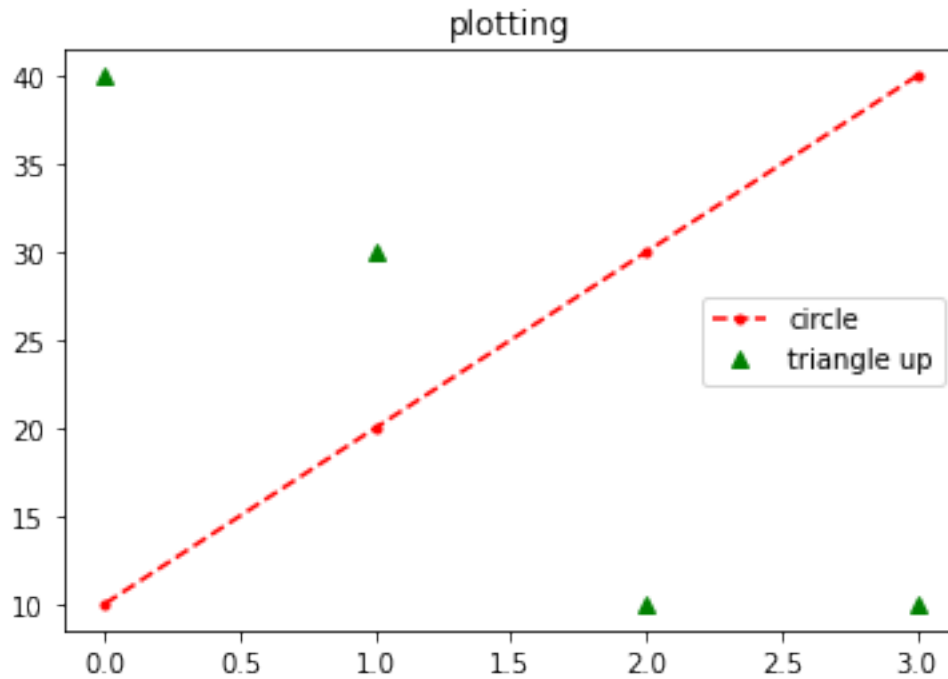
```
[11]: plot_label()
```

```
-----  
NameError                                Traceback (most recent call last)  
<ipython-input-11-74cdd451e6ac> in <module>  
----> 1 plot_label()  
  
NameError: name 'plot_label' is not defined
```

```
[ ]: def plot_marker():  
      plt.title("plotting")  
      plt.plot([10, 20, 30, 40], 'r.--', label='circle')
```

```
plt.plot([40, 30, 10, 10], 'g^', label='triangle up')
plt.legend()
plt.show()
```

[12]: plot_marker()



```
[ ]: def scatter():
      plt.title("plotting")
      plt.plot([10, 20, 30, 40], 'r.', label='circle')
      plt.plot([40, 30, 10, 10], 'g^', label='triangle up')
      plt.legend()
      plt.show()
```

[13]: scatter()

```
-----
NameError                                Traceback (most recent call last)
<ipython-input-13-a44159f130bf> in <module>
----> 1 scatter()

NameError: name 'scatter' is not defined
```

```

[ ]: def sorted_random_arr()-> []:
    arr = []
    [arr.append(random.randint(1, 1000)) for i in range(13)]
    return arr

def show_boxplot(arr: []):
    plt.boxplot(arr)
    plt.show()

def show_boxplot_month(month: str):
    plt.boxplot(highest_temperature(month))
    plt.show()

def show_boxplot_all_month():
    birth = ChangedTemperaturesOnMyBirthday()
    birth.read_data()
    data = birth.data

    #months = []
    #month1 = []
    month = [[], [], [], [], [], [], [], [], [], [], [], []]
    #for row in data:
    #    if row[-1] != '':
    #        month[int(row[0].split('-')[1])-1].append(float(row[-1]))
    #print(len(month))
    #print(month)
    #[[month1[int(row[0].split('-')[1]) - 1].append(float(row[-1])) for row in
    →data if row[-1] != '' for i in range(12)]
    #month = []
    [[month[int(row[0].split('-')[1])-1].append(float(row[-1])) for row in data
    →if row[-1] != '' for i in range(12)]
    #print(month[4])
    #print(len(month))
    return month

def show_boxplot_per_date(month : str):
    birth = ChangedTemperaturesOnMyBirthday()
    birth.read_data()
    data = birth.data
    day = []
    [day.append([]) for i in range(31)]
    [day[int(i[0].split('-')[2])-1].append(float(i[-1])) for i in data if i[-1]
    →!= '' if i[0].split('-')[1]==month]
    plt.style.use('ggplot')
    plt.figure(figsize=(10,5),dpi=300)
    plt.boxplot(day, showfliers=False)
    plt.show()

```

[]:

[]:

[]:

[]: