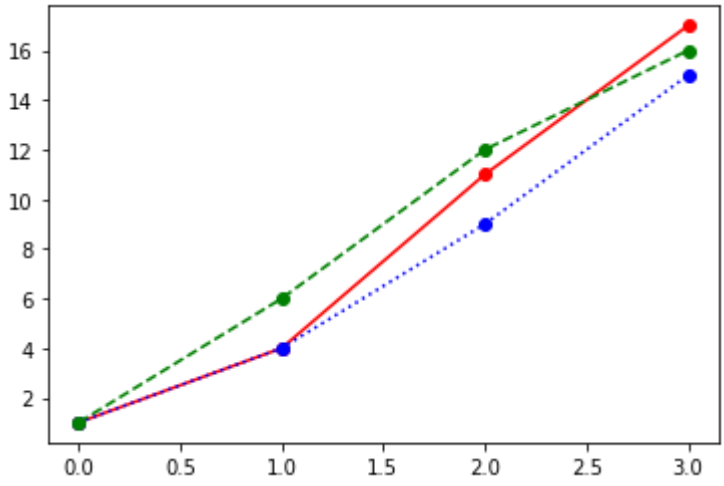
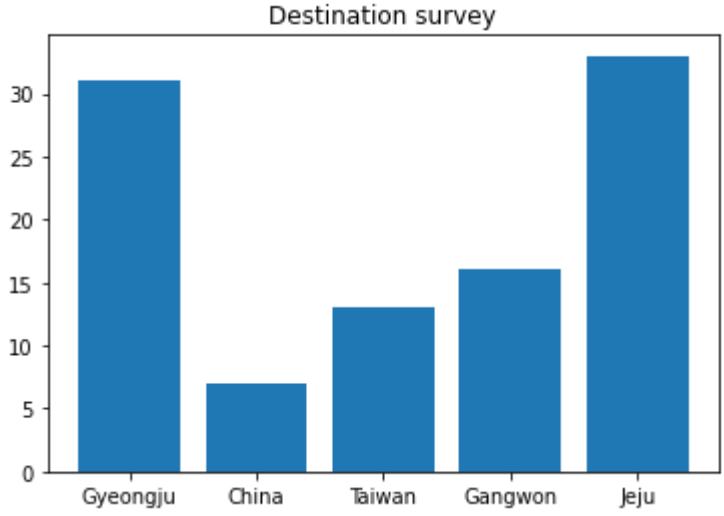
문제1) 선 그래프 그리기

```
 1 import matplotlib.pyplot as plt
 2 import numpy as np
 3
 4 x1 = np.array([1,4,11,17])
 5 x2 = np.array([1,4,9,15])
 6 x3 = np.array([1,6,12,16])
 7 plt.plot(x1,color='red',linestyle='solid',marker='o')
 8 plt.plot(x2,color='blue',linestyle='dotted',marker='o')
 9 plt.plot(x3,color='green',linestyle='dashed',marker='o')
10 plt.show()
```



문제2) 막대 그래프 그리기

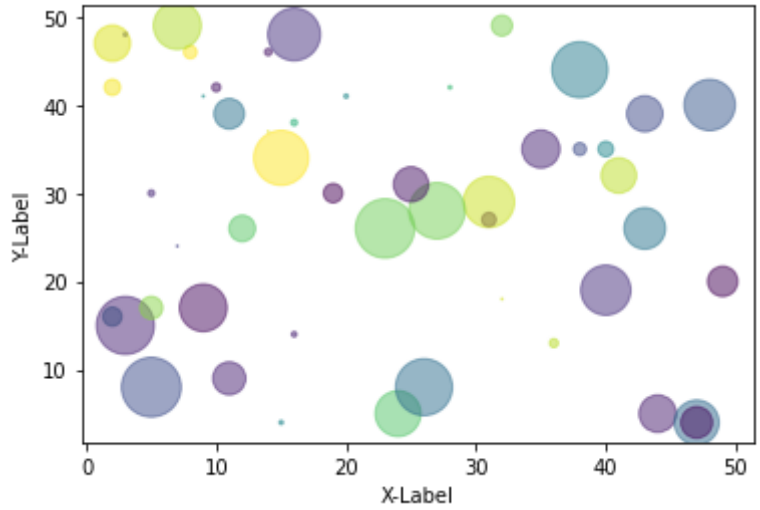
```
1 data_label = ['Gyeongju','China','Taiwan','Gangwon','Jeju']
2 data_set = [31,7,13,16,33]
3 plt.bar(data_label,data_set)
4 plt.title('Destination survey')
5 plt.show()
```



문제3) 산점도로 표현하시오

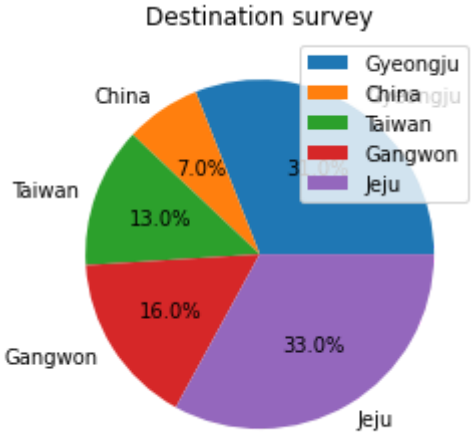
```
import random

x_data = [random.randint(1,50) for i in range(50)]
y_data = [random.randint(1,50) for i in range(50)]
colors = np.random.rand(50)
area = (30 * np.random.rand(50))**2

plt.xlabel('X-Label')
plt.ylabel('Y-Label')
plt.scatter(x_data,y_data,s=area,c=colors,alpha=0.5)
```

```
40
<matplotlib.collections.PathCollection at 0x7f95bee02ed0>
```



문제4) Matplotlib 원형차트

```
data_label = ['Gyeongju','China','Taiwan','Gangwon','Jeju']
data_set = [31,7,13,16,33]
plt.title('Destination survey')
plt.pie(data_set,labels=data_label,autopct='%.1f%%')
plt.legend()
plt.show()
```



✓ 0초 오후 3:55에 완료됨