

[Week8_homework_성혜원]

1. Challenge 1 : 전화번호부 만들기

```
In [3]: ▶ phonebook = [
  {
    'name' : '박지성',
    'phone' : '01031980923'
  },{
    'name' : '이청용',
    'phone' : '01031144566'
  },{
    'name' : '기성용',
    'phone' : '01045689653'
  }
]

#1단계
print("1단계 : 전체 출력하기")
print(phonebook)

#2단계
print('2단계 : 이청용 정보만 출력하기')
print(phonebook[1])
```

1단계 : 전체 출력하기
[{'name': '박지성', 'phone': '01031980923'}, {'name': '이청용', 'phone': '01031144566'}, {'name': '기성용', 'phone': '01045689653'}]
2단계 : 이청용 정보만 출력하기
{'name': '이청용', 'phone': '01031144566'}

2. Challenge 2 : 타이타닉 데이터로 바 차트 그리기

```
In [2]: ▶ import matplotlib.pyplot as plt
import seaborn as sns
sns.set()
```

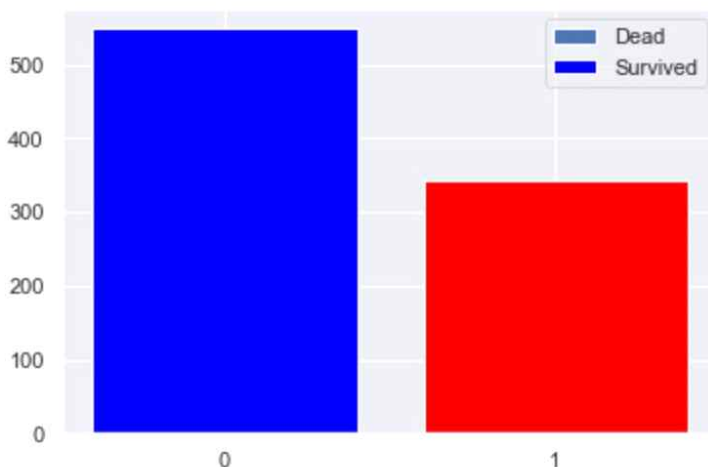
```
In [3]: ▶ import pandas as pd

train = pd.read_csv('data/train.csv')
```

```
In [7]: ▶ dead_cnt = train.loc[train['Survived']==0, 'PassengerId'].count()
survived_cnt = train.loc[train['Survived']==1, 'PassengerId'].count()

plt.bar([0, 1], [dead_cnt, survived_cnt])
plt.bar(['0'], [dead_cnt], color = 'blue')
plt.bar(['1'], [survived_cnt], color = 'red')
plt.legend(['Dead', 'Survived'])
```

Out[7]: <matplotlib.legend.Legend at 0x2b65b072e48>



3. Homework1 : 타이타닉 데이터로 성별, 생존수 데이터 프레임 만들기

```
In [1]: ▶ import pandas as pd
train = pd.read_csv('data/train.csv')
```

```
In [5]: ▶ dead_male_cnt = train[(train['Sex'] == 'male') & (train['Survived'] == 0)].shape[0]
dead_female_cnt = train[(train['Sex'] == 'female') & (train['Survived'] == 0)].shape[0]
survived_male_cnt = train[(train['Sex'] == 'male') & (train['Survived'] == 1)].shape[0]
survived_female_cnt = train[(train['Sex'] == 'female') & (train['Survived'] == 1)].shape[0]
print(dead_male_cnt, dead_female_cnt, survived_male_cnt, survived_female_cnt)
```

468 81 109 233

```
In [7]: ▶ df = pd.DataFrame({
    'male' : [dead_male_cnt, survived_male_cnt],
    'female' : [dead_female_cnt, survived_female_cnt]
})
```

df

Out[7]:

| | male | female |
|---|------|--------|
| 0 | 468 | 81 |
| 1 | 109 | 233 |