seaborn

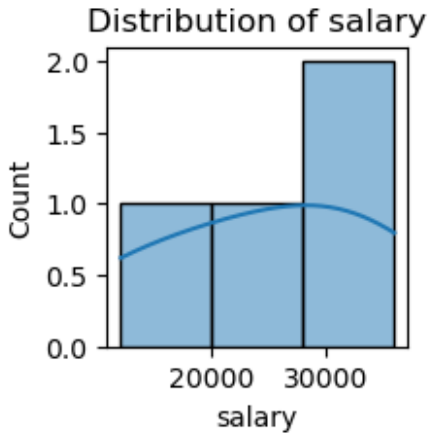
```
import seaborn as sns
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt

mydata={'Name':['ram','shyam','bhama','shanti'],
        'Age':[23,45,28,23],
         'salary':[12000,22000,30000,36000],
         'EXP':[2,5,4,1]}
df=pd.DataFrame(mydata)
df.head()
```

	Name	Age	salary	EXP
0	ram	23	12000	2
1	shyam	45	22000	5
2	bhama	28	30000	4
3	shanti	23	36000	1

histogram

```
plt.figure(figsize=(2,2))
sns.histplot(df['salary'],kde=True,bins=3)
plt.title('Distribution of salary')
plt.show()
```

```
C:\ProgramData\anaconda3\Lib\site-packages\seaborn\_oldcore.py:1119:
FutureWarning: use_inf_as_na option is deprecated and will be removed
in a future version. Convert inf values to NaN before operating
instead.
  with pd.option_context('mode.use_inf_as_na', True):
```



1.Negetive skew -->smaller value appeared
2.The average salary is observed in range of 25000-30000
3.average salary can be 28000
4.No outlets detected

correlation matrix(heatmap)

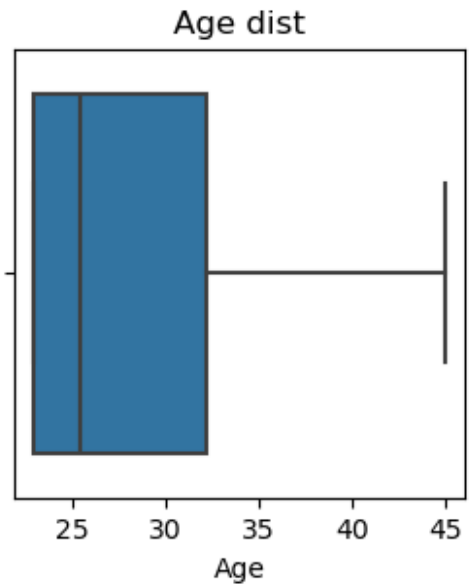
```
ndf=df.select_dtypes(include=['number'])
ndf.head()
```

	Age	salary	EXP
0	23	12000	2
1	45	22000	5
2	28	30000	4
3	23	36000	1

```
plt.figure(figsize=(2,2))
sns.heatmap(ndf.corr(),cmap='BuPu',annot=True)
plt.title('Corelation between salary age and exp')
plt.show()
```

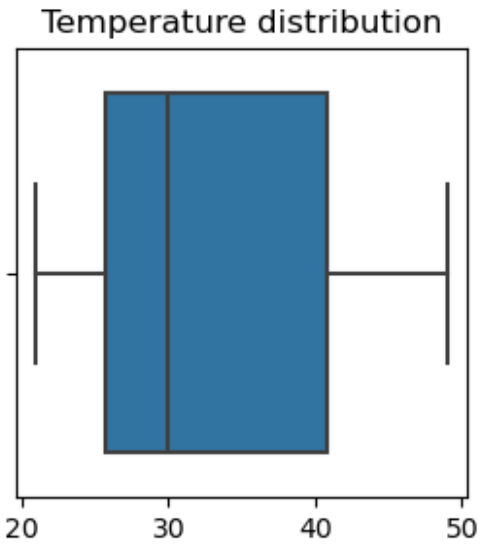
1. it shows the Corelation between salary age and exp
2. there is a positive relation between age and exp
3. there is a less relation between age and sal

```
plt.figure(figsize=(3,3))
sns.boxplot(x=df['Age'])
plt.title('Age dist')
plt.show()
```



1. average age value is 25
2. no abnormal outliner is found

```
temp=[21,47,39,22,31,33,29,26,27,25,49,46]
plt.figure(figsize=(3,3))
sns.boxplot(x=temp)
plt.title('Temperature distribution')
plt.show()
```

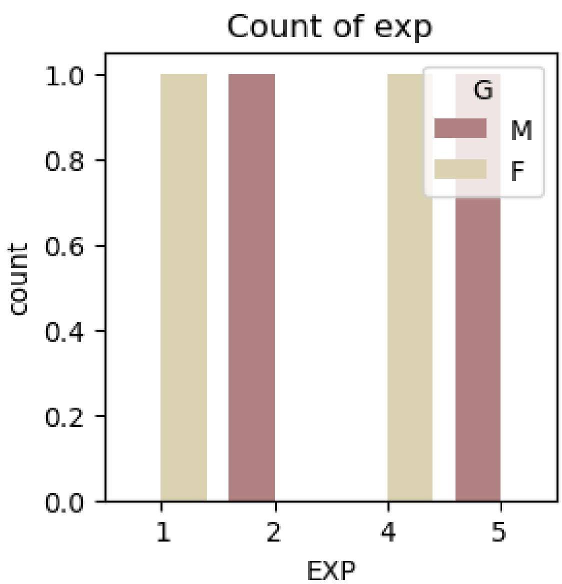


1.Average shows around 30

```
mydata1={'Name':['ram','shyam','bhama','shanti'],
       'Age':[23,45,28,23],
        'salary':[12000,22000,30000,36000],
```

```
        'EXP':[2,5,4,1],
       'G':['M','M','F','F']}
df1=pd.DataFrame(mydata1)
plt.figure(figsize=(3,3))
sns.countplot(x=df1['EXP'],palette='pink',hue=df1['G'])
plt.title('Count of exp')
```

```
Text(0.5, 1.0, 'Count of exp')
```




```
sns.pairplot(df1,hue='G')
```

```
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<seaborn.axisgrid.PairGrid at 0x18b4d782b10>
```

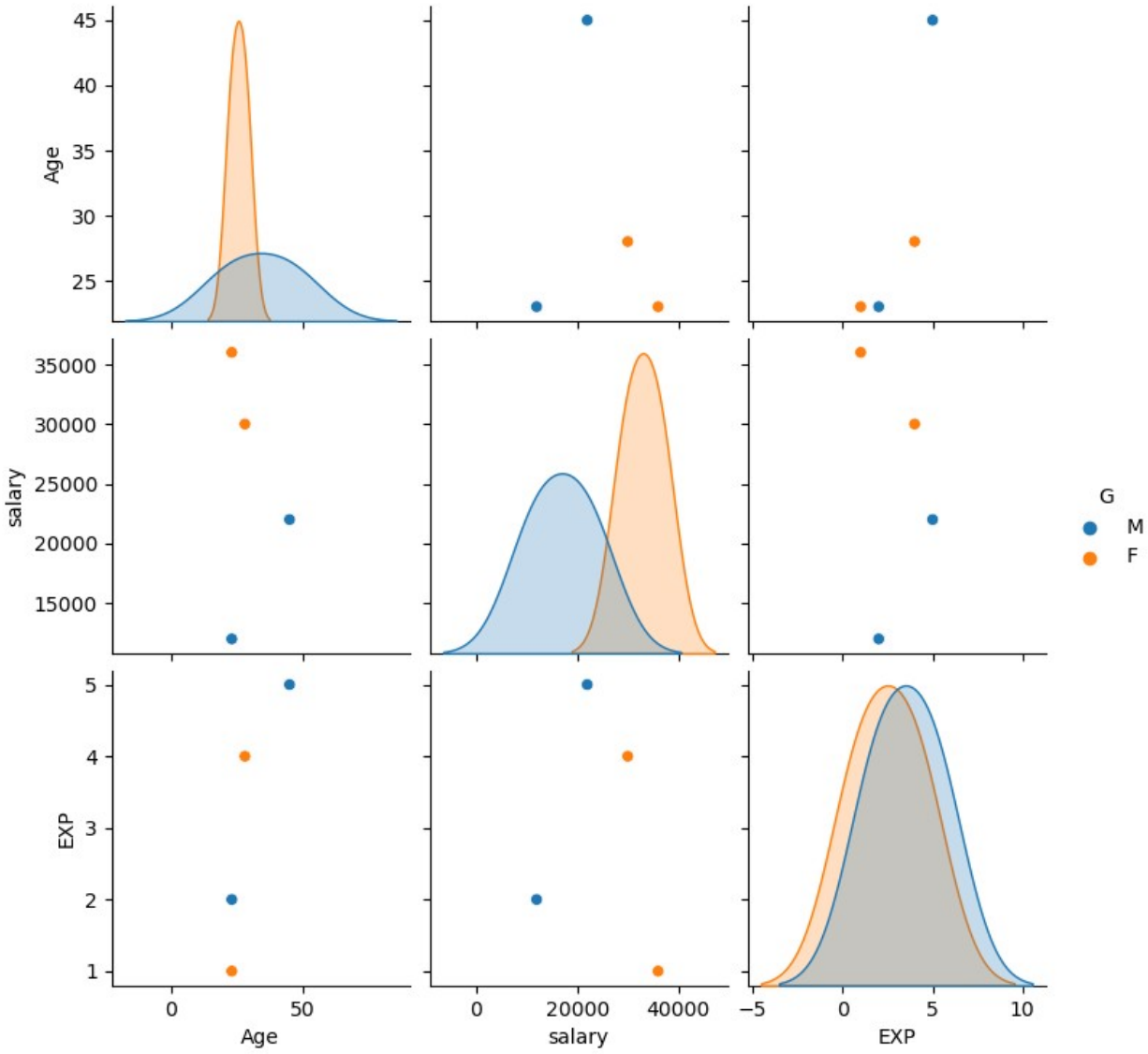
Age
salary
EXP
G
M
F
45
40
35
30
25
35000
30000
25000
20000
15000
5
4
3
2
1
0
50
20000
40000
−5
0
5
10
Age
salary
EXP