```
In [1]: import openpyxl
         import pandas as pd
         workbook=openpyxl.Workbook()
         sheet=workbook.active
         data=[
              ['NAME', 'DOMAIN', 'AGE', 'LOCATION', 'SALARY', 'EXP'],
                ['ALEX', 'TESTING', 25, 'BANGLORE', 5000, 2],
                ['BARBIE','JAVA',24,'HYDERABAD',10000,3],
                ['CHERRY', 'PYTHON', 26, 'CHENNAI', 20000, 4],
                ['ESWAR','C',25,'PUNE',25000,5],
                ['SIEMEN', 'DATA ANALYST', 27, 'BANGLORE', 35000]
         for row in data:
             sheet.append(row)
         workbook.save('data.xlsx')
In [2]:
         data
```

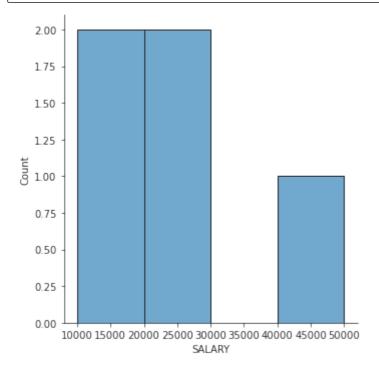
```
Out[2]: [['NAME', 'DOMAIN', 'AGE', 'LOCATION', 'SALARY', 'EXP'], ['ALEX', 'TESTING', 25, 'BANGLORE', 5000, 2], ['BARBIE', 'JAVA', 24, 'HYDERABAD', 10000, 3], ['CHERRY', 'PYTHON', 26, 'CHENNAI', 20000, 4], ['ESWAR', 'C', 25, 'PUNE', 25000, 5], ['SIEMEN', 'DATA ANALYST', 27, 'BANGLORE', 35000]]
```

```
In [7]:
         import os
         os.getcwd()
Out[7]: 'C:\\Users\\manga'
         emp=pd.read_excel(r'C:\Users\manga\Desktop\NIT Class Notes\Assignments\data.xlsx')
In [9]:
         emp
Out[9]:
             S.NO
                     NAME
                                DOMAIN AGE
                                               LOCATION SALARY EXPERIENCE
                     ALEX
                               TESTING
                                              BANGLORE
                                                           10000
          0
                1
                                          25
                   BARBIE
          1
                                   JAVA
                                          24 HYDERABAD
                                                           15000
                                                                          3
                   CHERRY
                                PYTHON
                                          26
                                                CHENNAI
                                                           20000
                                                                          4
                   ESWAR
                                          25
          3
                                     С
                                                  PUNE
                                                           25000
                                                                          5
          4
               5 SIEMSON DATA ANALYST
                                              BANGLORE
                                          27
                                                           50000
                                                                          6
In [10]:
         emp.shape
Out[10]: (5, 7)
In [11]:
         emp.columns
         Index(['S.NO', 'NAME', 'DOMAIN', 'AGE', 'LOCATION', 'SALARY', 'EXPERIENCE'], dtype
Out[11]:
         ='object')
```

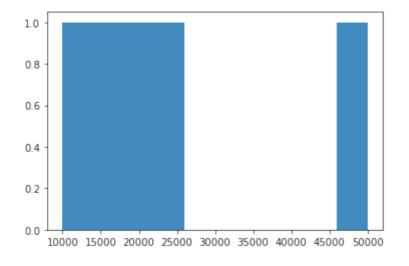
In [12]:	len(emp.	columns)						
Out[12]:	7								
In [13]:	len(emp)							
Out[13]:	5								
In [14]:	emp								
Out[14]:									
Out[14]:	S	.NO	NAME	DOMAIN	AGE	LOCATION	SALARY	EXPERIENCE	
Out[14]:	S 0	. NO	NAME ALEX	DOMAIN TESTING	AGE 25		SALARY 10000	EXPERIENCE 2	
Out[14]:					25				
Out[14]:	0	1	ALEX	TESTING	25	BANGLORE	10000	2	
Out[14]:	0	1 2	ALEX BARBIE	TESTING JAVA	25 24	BANGLORE HYDERABAD	10000 15000	2	
Out[14]:	0 1 2	1 2 3 4	ALEX BARBIE CHERRY ESWAR	TESTING JAVA PYTHON	25 24 26	BANGLORE HYDERABAD CHENNAI PUNE	10000 15000 20000	2 3 4	
Out[14]:	0 1 2 3	1 2 3 4	ALEX BARBIE CHERRY ESWAR	TESTING JAVA PYTHON C	25 24 26 25	BANGLORE HYDERABAD CHENNAI PUNE	10000 15000 20000 25000	2 3 4 5	

```
In [15]: emp['SALARY']
Out[15]: 0
              10000
              15000
              20000
             25000
         4
              50000
         Name: SALARY, dtype: int64
         emp[['SALARY','EXPERIENCE']]
In [19]:
Out[19]:
            SALARY EXPERIENCE
              10000
              15000
          2
              20000
              25000
          3
              50000
                              6
In [22]:
         import numpy as np
         import matplotlib.pyplot as plt
         import seaborn as sns
```

In [23]: vis1=sns.displot(emp['SALARY'])



In [24]: vis2=plt.hist(emp['SALARY'])

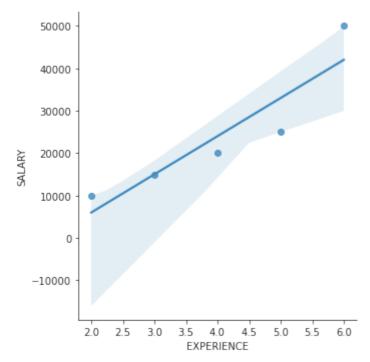


In [27]: plt.rcParams['figure.figsize']=5,1

In [28]: vis3=sns.lmplot(data=emp,x='EXPERIENCE',y='SALARY') emp

Out[28]:

	S.NO	NAME	DOMAIN	AGE	LOCATION	SALARY	EXPERIENCE
0	1	ALEX	TESTING	25	BANGLORE	10000	2
1	2	BARBIE	JAVA	24	HYDERABAD	15000	3
2	3	CHERRY	PYTHON	26	CHENNAI	20000	4
3	4	ESWAR	С	25	PUNE	25000	5
4	5	SIEMSON	DATA ANALYST	27	BANGLORE	50000	6



vis4=sns.lmplot(data=emp,x='EXPERIENCE',y='SALARY',fit_reg=False) In [29]: 50000 45000 40000 35000 SALARY 30000 25000 20000 15000 10000

2.0

2.5

3.0

3.5

.5 4.0 4. EXPERIENCE

4.5

5.0

5.5

6.0

