

SalaryAnalysis

August 1, 2025

```
[1]: import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

```
[2]: salary = pd.read_excel("../..../datasets/salary.xlsx")
```

```
[3]: salary.head()
```

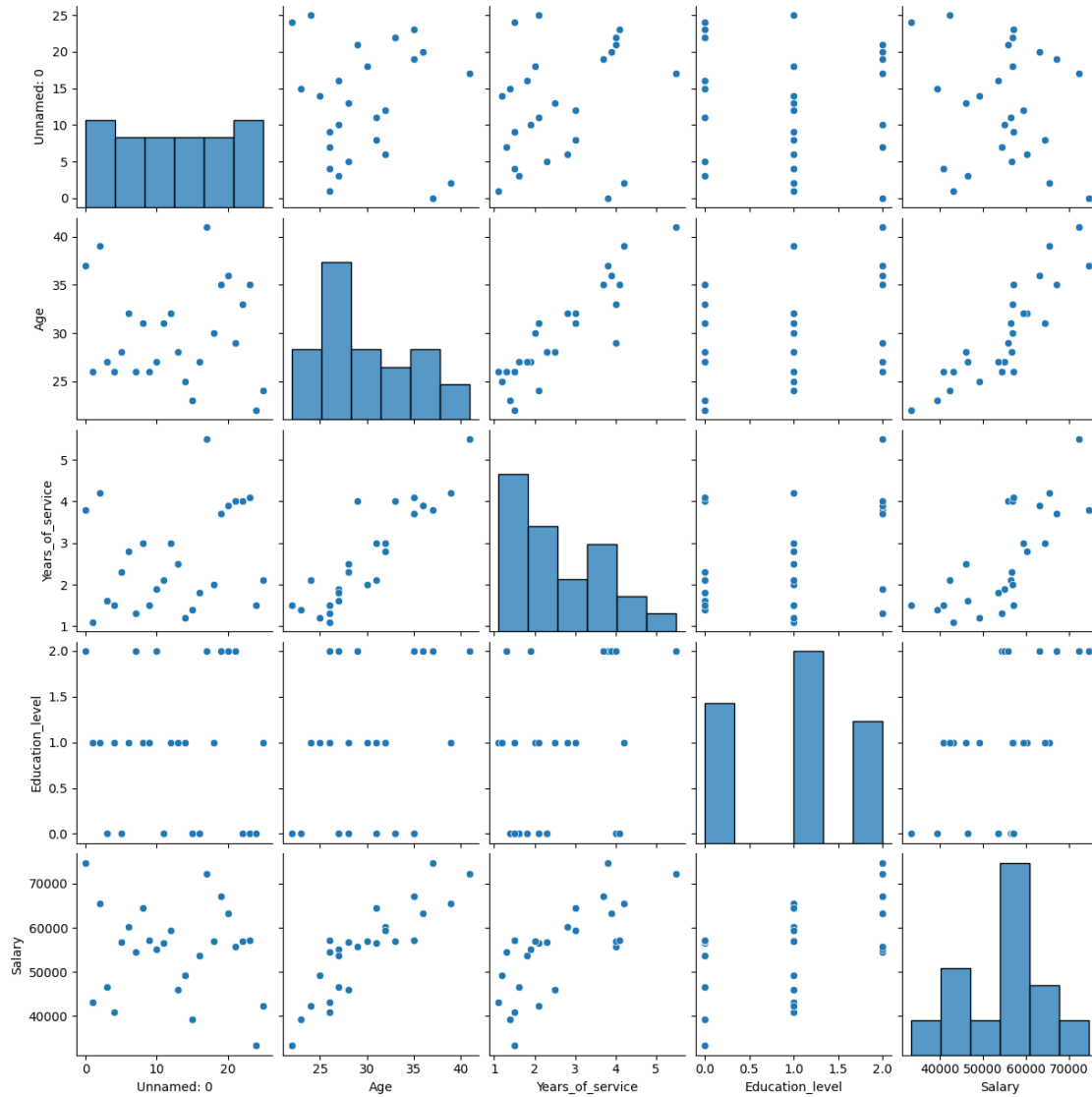
```
[3]:   Unnamed: 0  Gender  Age  Years_of_service  Education_level  Salary
0           0   male   37           3.8           2      74685
1           1  female   26           1.1           1      43205
2           2   male   39           4.2           1      65550
3           3  female   27           1.6           0      46525
4           4  female   26           1.5           1      40891
```

```
[4]: salary.describe()
```

```
[4]:   Unnamed: 0      Age  Years_of_service  Education_level      Salary
count    26.000000  26.000000      26.000000      26.000000      26.000000
mean     12.500000  29.846154       2.607692       0.961538  54915.923077
std       7.648529   5.017508       1.198306       0.773603  10149.276463
min       0.000000  22.000000       1.100000       0.000000  33287.000000
25%       6.250000  26.000000       1.525000       0.000000  47204.500000
50%      12.500000  28.500000       2.200000       1.000000  56547.000000
75%      18.750000  32.750000       3.775000       1.750000  59945.500000
max      25.000000  41.000000       5.500000       2.000000  74685.000000
```

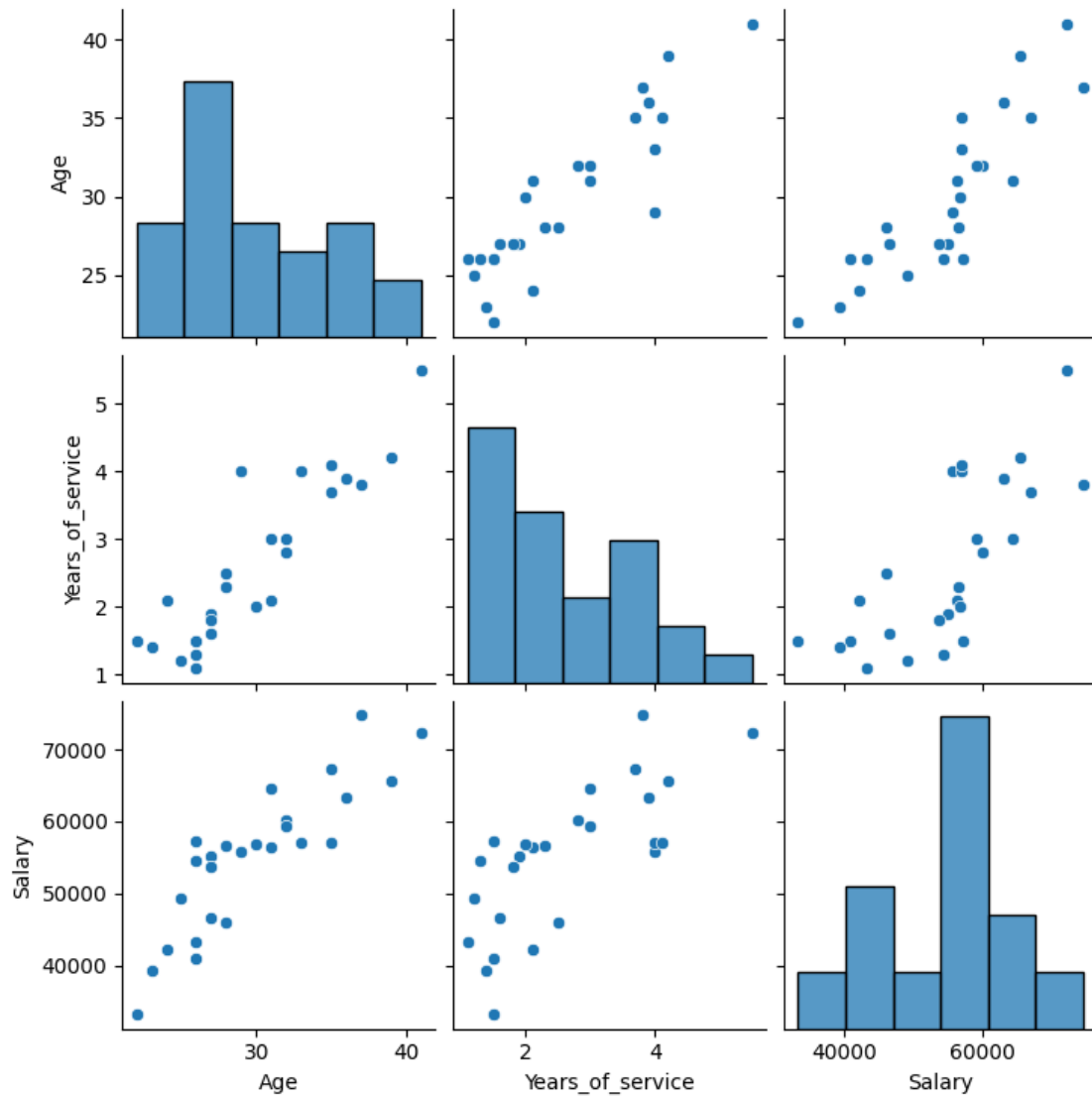
```
[5]: sns.pairplot(salary)
```

```
[5]: <seaborn.axisgrid.PairGrid at 0x7fc9c3f2af10>
```



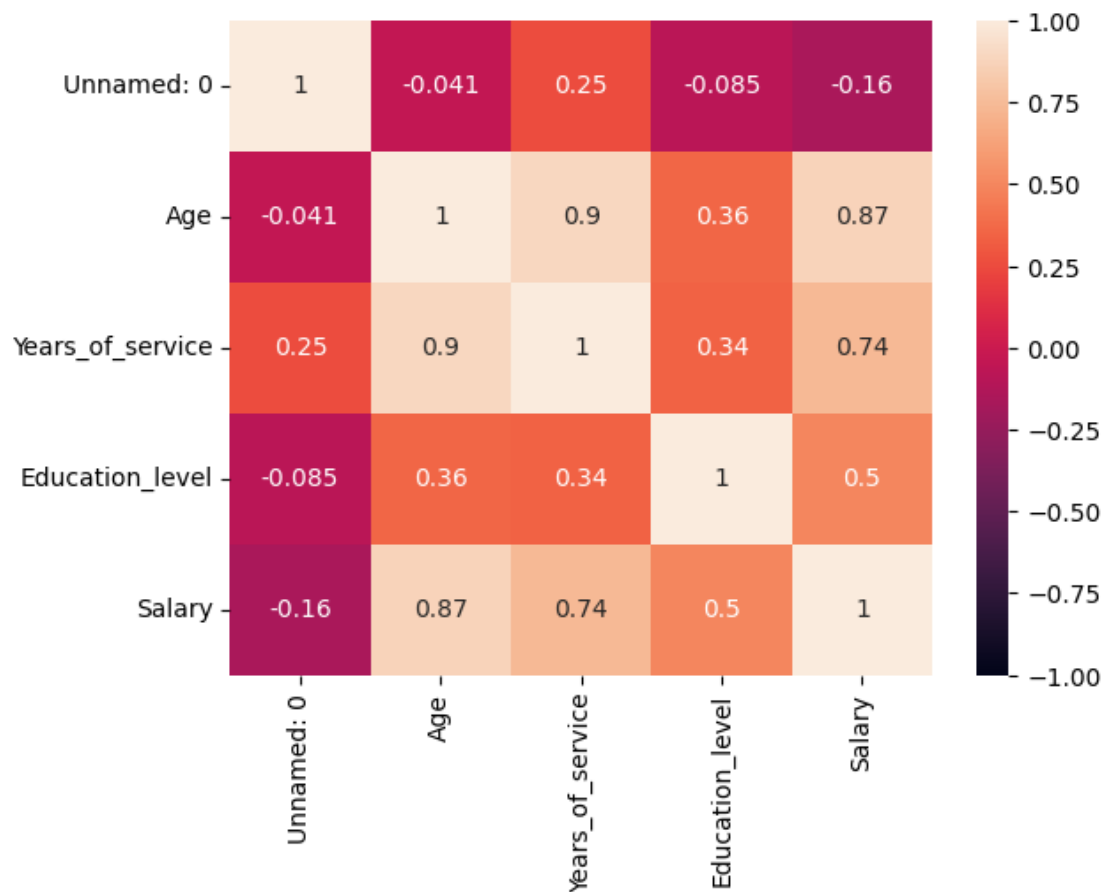
```
[6]: cols_to_plot=["Age", "Years_of_service", "Salary"]
sns.pairplot(salary[cols_to_plot])
```

```
[6]: <seaborn.axisgrid.PairGrid at 0x7fc9c0d94d50>
```



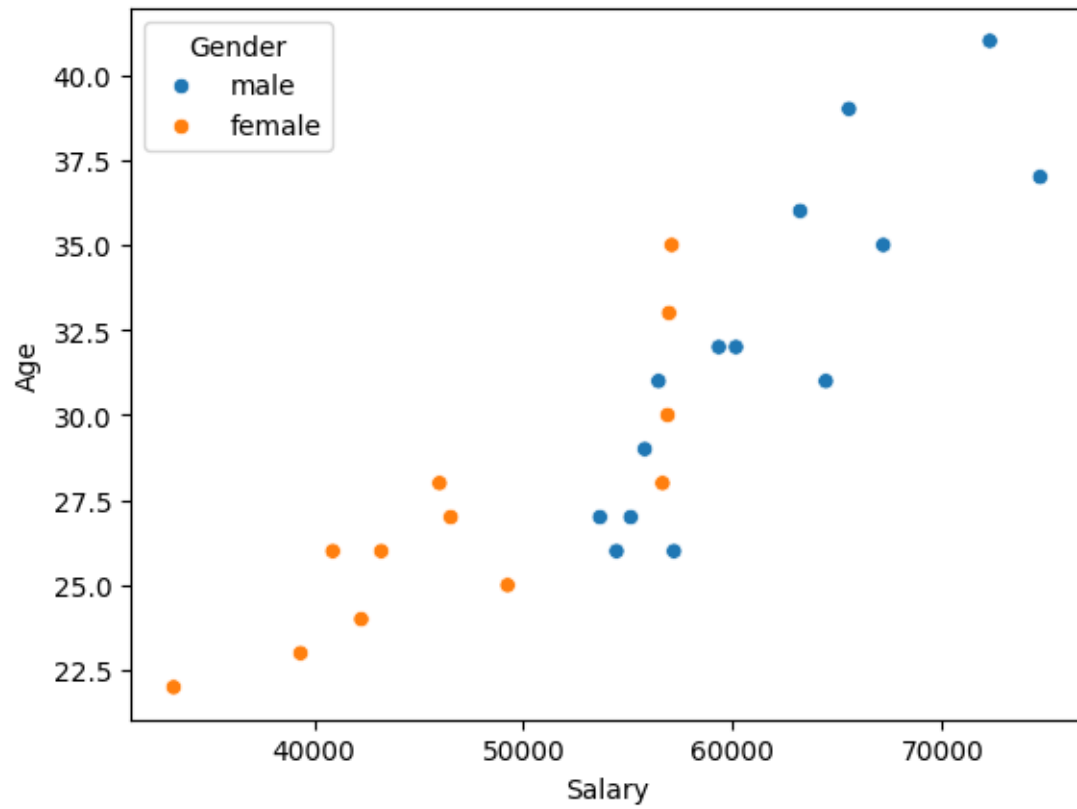
```
[7]: sns.heatmap(salary.corr(numeric_only=True), vmin=-1, vmax=1, annot=True)
```

```
[7]: <Axes: >
```



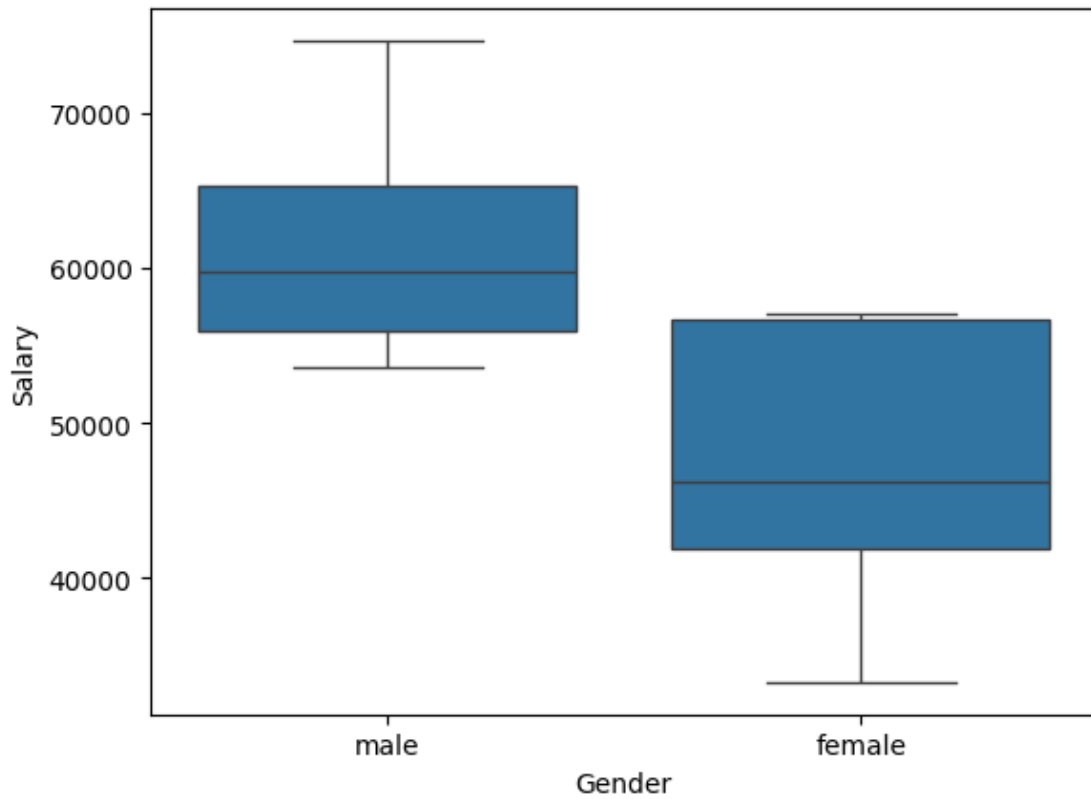
```
[8]: sns.scatterplot(x = "Salary", y = "Age", data = salary, hue = "Gender")
```

```
[8]: <Axes: xlabel='Salary', ylabel='Age'>
```



```
[9]: sns.boxplot(x = "Gender", y = "Salary", data = salary)
```

```
[9]: <Axes: xlabel='Gender', ylabel='Salary'>
```



```
[10]: salary.head()
```

```
[10]: Unnamed: 0  Gender  Age  Years_of_service  Education_level  Salary
0          0    male   37          3.8           2      74685
1          1  female   26          1.1           1      43205
2          2    male   39          4.2           1      65550
3          3  female   27          1.6           0      46525
4          4  female   26          1.5           1      40891
```

```
[11]: sns.boxplot(x = "Gender", y = "Salary", data = salary)
```

```
[11]: <Axes: xlabel='Gender', ylabel='Salary'>
```

