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In [1]: import numpy as np
import pandas as pd
```

```
In [2]: ## Reading from file
df = pd.read_csv("C:/Users/SW20407278/Desktop/Final AI/Hands-On/Pandas/employee.csv")
```

```
In [3]: df.head()
```

```
Out[3]:
```

	Empid	Name	Salary
0	1	Smith	5000
1	2	Jones	6000
2	3	Harry	4000
3	4	Jem	5000
4	5	Sylvia	4000

```
In [4]: df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 8 entries, 0 to 7
Data columns (total 3 columns):
 #   Column  Non-Null Count  Dtype
---  -
 0   Empid   8 non-null      int64
 1   Name    8 non-null      object
 2   Salary  8 non-null      int64
dtypes: int64(2), object(1)
memory usage: 320.0+ bytes
```

```
In [5]: df["Annual_Salary"] = df.Salary*12
```

```
In [6]: df
```

```
Out[6]:
```

	Empid	Name	Salary	Annual_Salary
0	1	Smith	5000	60000
1	2	Jones	6000	72000
2	3	Harry	4000	48000
3	4	Jem	5000	60000
4	5	Sylvia	4000	48000
5	6	Charles	4000	48000
6	7	William	5000	60000
7	7	William	5000	60000

```
In [10]: ## Function to calculate annual increment

def cal_sal(Salary):
```

```

inc = 0

if Salary > 5000 :
    inc = Salary*30/100
else:
    inc = 3000
return inc

```

In [11]: `cal_sal(6000)`

Out[11]: 1800.0

In [16]: *## You can apply function on each row for series.*
`df["Updated_Salary_With_Increment"] = df.Salary.apply(cal_sal)`

In [17]: `df`

Out[17]:

	Empid	Name	Salary	Annual_Salary	Updated_Salary_With_Increment
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0	1	Smith	5000	60000	3000.0
1	2	Jones	6000	72000	1800.0
2	3	Harry	4000	48000	3000.0
3	4	Jem	5000	60000	3000.0
4	5	Sylvia	4000	48000	3000.0
5	6	Charles	4000	48000	3000.0
6	7	William	5000	60000	3000.0
7	7	William	5000	60000	3000.0

In [20]: *## Adding Series to the existing dataframe*
`df["Department"] = pd.Series(["Finance", "HR", "IT", "HR","Finance","IT","IT","HR"])`

In [21]: `df`

Out[21]:

	Empid	Name	Salary	Annual_Salary	Updated_Salary_With_Increment	Department
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0	1	Smith	5000	60000	3000.0	Finance
1	2	Jones	6000	72000	1800.0	HR
2	3	Harry	4000	48000	3000.0	IT
3	4	Jem	5000	60000	3000.0	HR
4	5	Sylvia	4000	48000	3000.0	Finance
5	6	Charles	4000	48000	3000.0	IT
6	7	William	5000	60000	3000.0	IT
7	7	William	5000	60000	3000.0	HR

In []: