


```
import numpy as np
import pandas as pd
```

```
dataset = pd.read_csv("Data.csv")
dataset.describe()
```




	Age	Salary
<b>count</b>	16.000000	16.000000
<b>mean</b>	38.562500	62562.500000
<b>std</b>	8.057864	13691.694563
<b>min</b>	25.000000	40000.000000
<b>25%</b>	33.750000	53500.000000
<b>50%</b>	39.000000	60500.000000
<b>75%</b>	43.250000	70500.000000
<b>max</b>	52.000000	90000.000000

```
dataset.isnull().sum()
```



```
Country      0
Age          3
Salary       3
Purchased    0
dtype: int64
```

```
dataset = pd.get_dummies(dataset,columns=["Country"],prefix='',prefix_sep='',dtype=int)
dataset = pd.get_dummies(dataset,columns=["Purchased"],prefix='',prefix_sep='',dtype=int)
dataset
```



	Age	Salary	China	India	Indonesia	Thailand	No	Yes
0	44.0	72000.0	0	1	0	0	1	0
1	27.0	48000.0	0	0	0	1	0	1
2	30.0	54000.0	0	0	1	0	1	0
3	38.0	61000.0	1	0	0	0	1	0
4	40.0	NaN	0	1	0	0	0	1
5	35.0	58000.0	1	0	0	0	0	1
6	NaN	52000.0	0	0	0	1	1	0
7	48.0	79000.0	0	1	0	0	0	1
8	50.0	83000.0	0	0	1	0	1	0
9	37.0	67000.0	0	0	0	1	0	1
10	25.0	NaN	0	1	0	0	1	0
11	36.0	60000.0	0	0	0	1	1	0
12	42.0	64000.0	0	0	1	0	0	1
13	NaN	40000.0	0	1	0	0	0	1
14	52.0	90000.0	0	0	0	1	0	1
15	NaN	55000.0	0	0	1	0	1	0
16	41.0	NaN	1	0	0	0	0	1
17	29.0	48000.0	0	1	0	0	1	0
18	43.0	70000.0	1	0	0	0	0	1

```
col_means = dataset.mean()
dataset =dataset.replace(to_replace=np.nan,value=col_means)
```

```
dataset.isnull().sum()
```

```

Age      0
Salary   0
China    0
India    0
Indonesia 0
Thailand 0
No       0
Yes      0
dtype: int64

```

```

from sklearn.preprocessing import MinMaxScaler
scaler = MinMaxScaler()
dataset.iloc[:,2] = scaler.fit_transform(dataset.iloc[:,2])
dataset

```

```

Age  Salary  China  India  Indonesia  Thailand  No  Yes
0  0.703704  0.64000  0     1         0         0  1   0
1  0.074074  0.16000  0     0         0         1  0   1
2  0.185185  0.28000  0     0         1         0  1   0
3  0.481481  0.42000  1     0         0         0  1   0
4  0.555556  0.45125  0     1         0         0  0   1
5  0.370370  0.36000  1     0         0         0  0   1
6  0.502315  0.24000  0     0         0         1  1   0
7  0.851852  0.78000  0     1         0         0  0   1
8  0.925926  0.86000  0     0         1         0  1   0
9  0.444444  0.54000  0     0         0         1  0   1
10 0.000000  0.45125  0     1         0         0  1   0
11 0.407407  0.40000  0     0         0         1  1   0
12 0.629630  0.48000  0     0         1         0  0   1
13 0.502315  0.00000  0     1         0         0  0   1
14 1.000000  1.00000  0     0         0         1  0   1
15 0.502315  0.30000  0     0         1         0  1   0
16 0.592593  0.45125  1     0         0         0  0   1
17 0.148148  0.16000  0     1         0         0  1   0
18 0.666667  0.60000  1     0         0         0  0   1

```