```python
import numpy as np
import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt
data = sns.load_dataset('titanic')
data.head()
```

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male	deck	embark_town	alive	alone
0	0	3	male	22.0	1	0	7.2500	S	Third	man	True	NaN	Southampton	no	False
1	1	1	female	38.0	1	0	71.2833	C	First	woman	False	C	Cherbourg	yes	False
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	False	NaN	Southampton	yes	True
3	1	1	female	35.0	1	0	53.1000	S	First	woman	False	C	Southampton	yes	False
4	0	3	male	35.0	0	0	8.0500	S	Third	man	True	NaN	Southampton	no	True

```python
#Code to print survival status gender wise
data.groupby('sex')[['survived']].mean()
```

	survived
sex	
female	0.742038
male	0.188908

```python
data.groupby(['sex', 'class'])[['survived']].aggregate('mean').unstack()
```

	survived		
class	First	Second	Third
sex			
female	0.968085	0.921053	0.500000
male	0.368852	0.157407	0.135447

```python
#if we do not apply unstack() after groupby()
stacked_data = data.groupby(['sex', 'class'])[['survived']].aggregate('mean')
stacked_data
```

		survived
sex	**class**	
female	**First**	0.968085
	Second	0.921053
	Third	0.500000
male	**First**	0.368852
	Second	0.157407
	Third	0.135447

```python
# For better view let's apply unstack()
stacked_data = data.groupby(['sex', 'class'])[['survived']].aggregate('mean')
stacked_data.unstack()
```

	survived		
class	First	Second	Third
sex			
female	0.968085	0.921053	0.500000
male	0.368852	0.157407	0.135447

```
# survival rate by both sex and class using pivot_table()
data.pivot_table('survived', index='sex', columns='class')
```

class	First	Second	Third
sex			
female	0.968085	0.921053	0.500000
male	0.368852	0.157407	0.135447