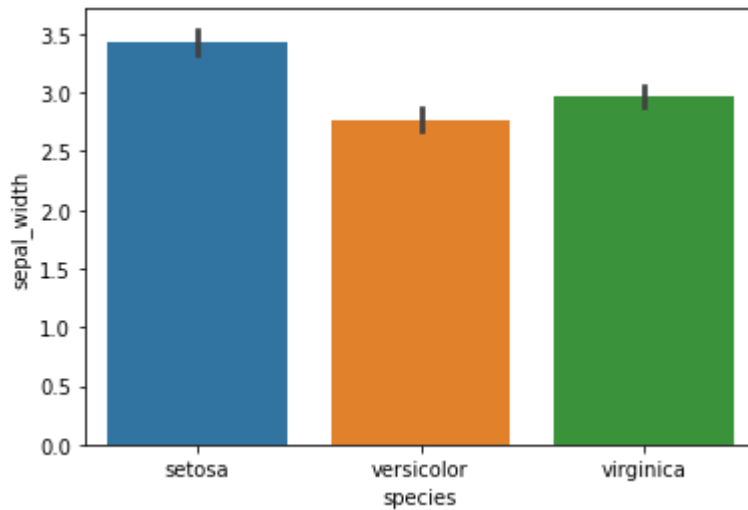


```
In [ ]: import seaborn as sns
import matplotlib.pyplot as plt
import pandas as pd
import numpy as np
```

```
In [ ]: flower= sns.load_dataset("iris")
```

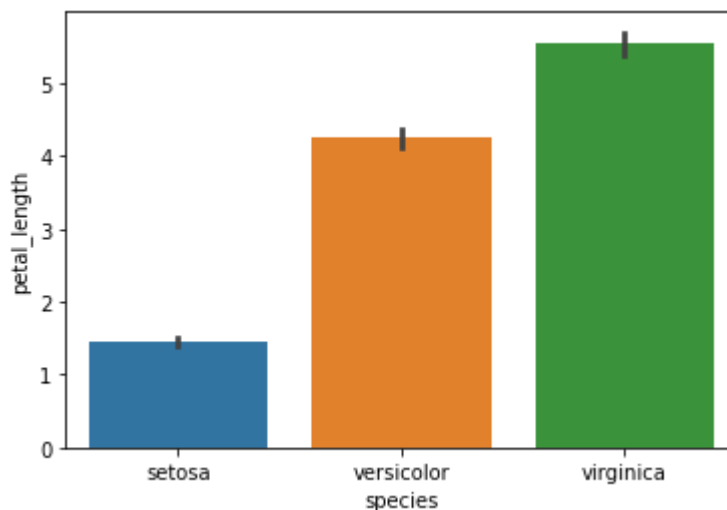
```
In [ ]: sns.barplot(x="species", y= "sepal_width", data= flower)
plt.show
```

```
Out[ ]: <function matplotlib.pyplot.show(close=None, block=None)>
```



```
In [ ]: sns.barplot(x="species", y= "petal_length", data= flower)
plt.show
```

```
Out[ ]: <function matplotlib.pyplot.show(close=None, block=None)>
```



now for grouping you must need different

datasets

```
In [ ]: kashti = sns.load_dataset("titanic")
```

```
In [ ]: kashti
```

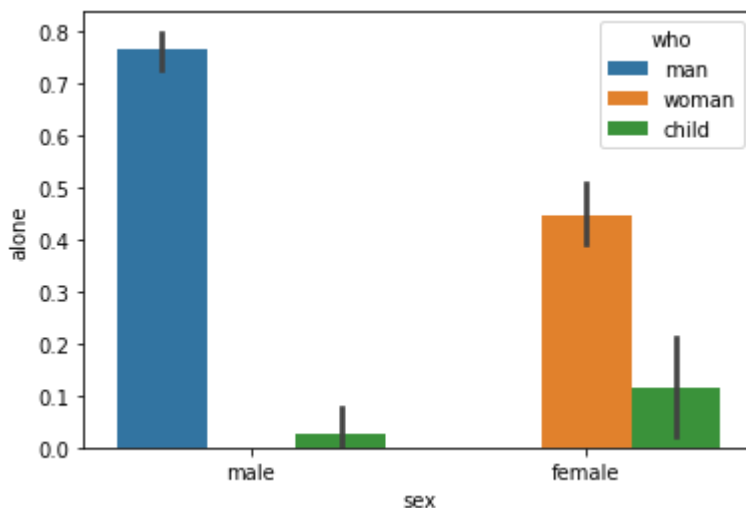
```
Out[ ]:
```

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male	c
0	0	3	male	22.0	1	0	7.2500	S	Third	man	True	I
1	1	1	female	38.0	1	0	71.2833	C	First	woman	False	
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	False	I
3	1	1	female	35.0	1	0	53.1000	S	First	woman	False	
4	0	3	male	35.0	0	0	8.0500	S	Third	man	True	I
...	
886	0	2	male	27.0	0	0	13.0000	S	Second	man	True	I
887	1	1	female	19.0	0	0	30.0000	S	First	woman	False	
888	0	3	female	NaN	1	2	23.4500	S	Third	woman	False	I
889	1	1	male	26.0	0	0	30.0000	C	First	man	True	
890	0	3	male	32.0	0	0	7.7500	Q	Third	man	True	I

891 rows × 15 columns

```
In [ ]: sns.barplot(x="sex", y="alone", hue="who", data=kashti)
plt.show
```

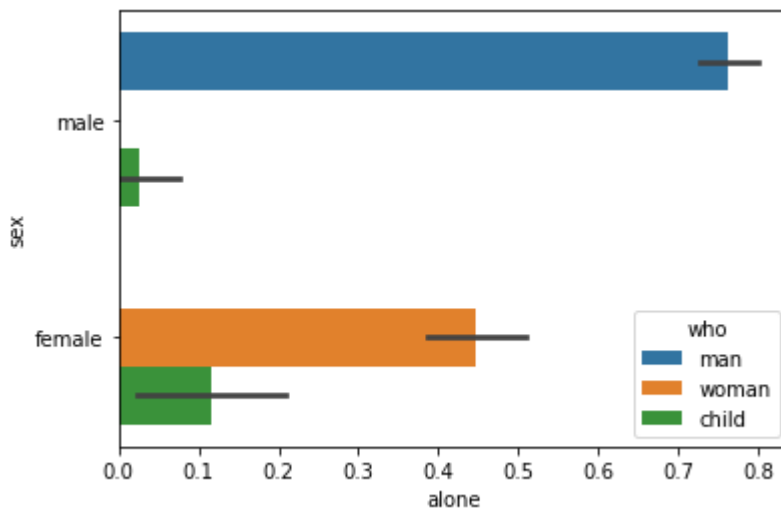
```
Out[ ]: <function matplotlib.pyplot.show(close=None, block=None)>
```



Horizontal plot

```
In [ ]: #you have to just change the x and yaxis of catogries
sns.barplot(x="alone", y= "sex", hue= "who", data= kashti)
plt.show
```

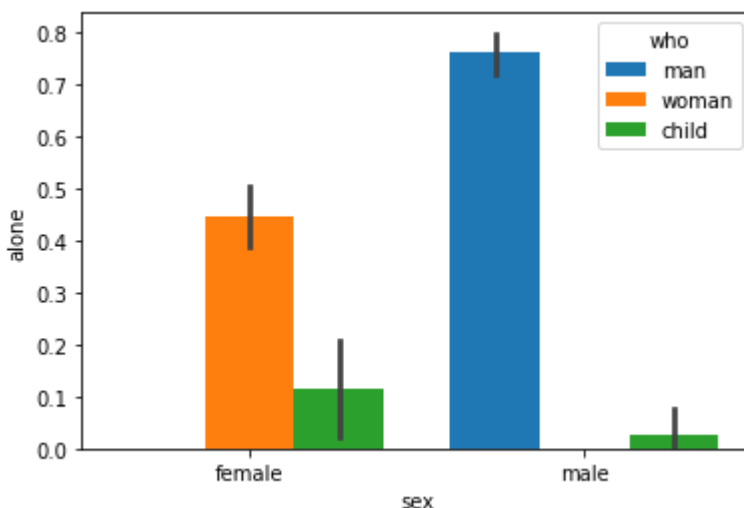
```
Out[ ]: <function matplotlib.pyplot.show(close=None, block=None)>
```



Now how to set ordering the group

```
In [ ]: sns.barplot(x="sex", y= "alone", hue= "who", data= kashti,
order=["female", "male"], saturation=1)
plt.show
```

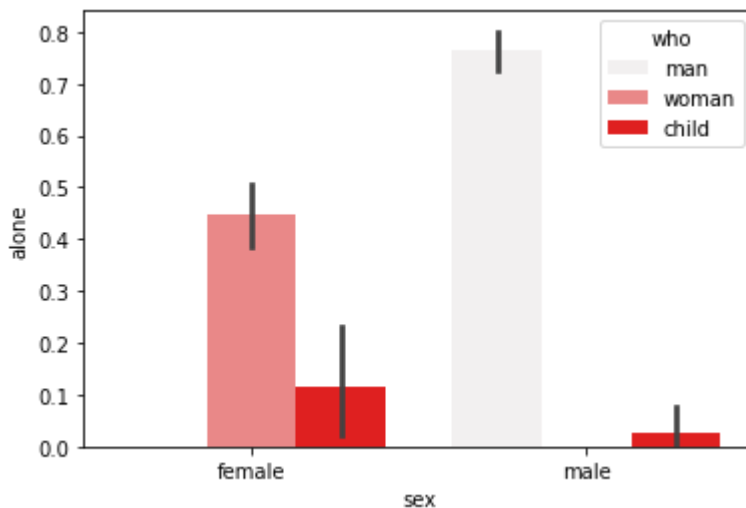
```
Out[ ]: <function matplotlib.pyplot.show(close=None, block=None)>
```



for colouring colour pelet

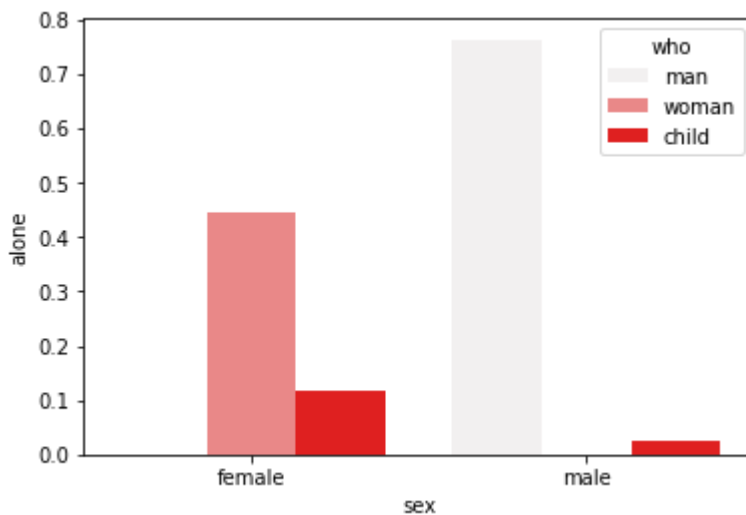
```
In [ ]: sns.barplot(x="sex", y="alone", hue="who", data= kashti,
order=["female", "male"], color= "red")
plt.show
```

```
Out[ ]: <function matplotlib.pyplot.show(close=None, block=None)>
```



```
In [ ]: sns.barplot(x="sex", y="alone", hue="who", data= kashti,
order=["female", "male"], color= "red", ci=None) #ci = None is used for error bar
plt.show
```

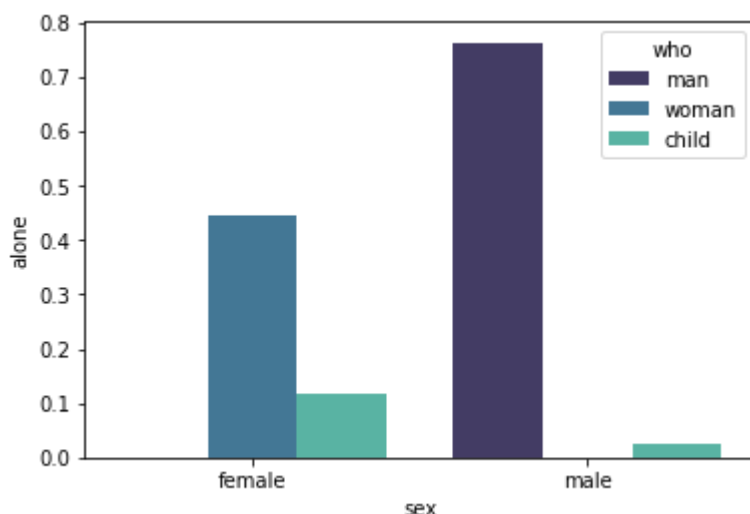
```
Out[ ]: <function matplotlib.pyplot.show(close=None, block=None)>
```



```
In [ ]: # already develop pllet seaborn palette
#some example are "tab10", "pastel", "muted", "bright", "colorblind", "dark"
# "Set2", "husl", "hls", "Set2", "paired", "rocket", "mako"

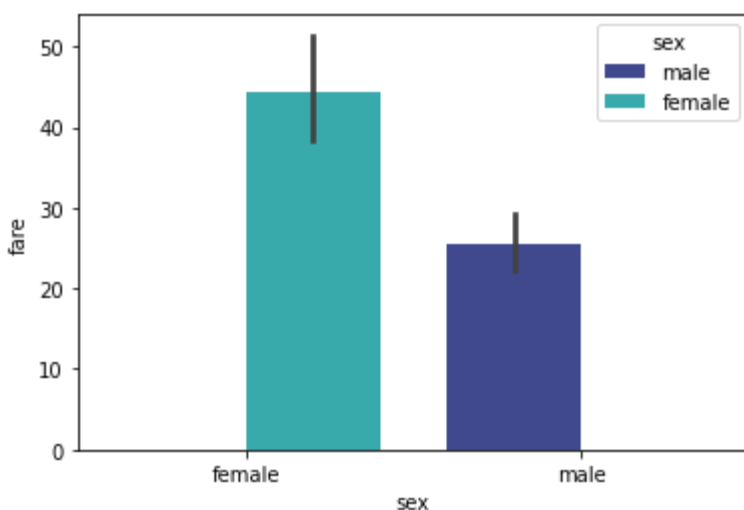
sns.barplot(x="sex", y="alone", hue="who", data= kashti,
order=["female", "male"], color= "red", ci=None,
palette="mako") #ci = None is used for error bar
plt.show
```

Out[]: <function matplotlib.pyplot.show(close=None, block=None)>



```
In [ ]: # estimator we use as a numerical value n saturation
from numpy import mean
sns.barplot(x="sex", y="fare", hue="sex", data=kashti,
order=["female", "male"], color="red", estimator=mean,
palette="mako", saturation=1) #ci = None is used for error bar
plt.show
```

Out[]: <function matplotlib.pyplot.show(close=None, block=None)>



```
In [ ]: kashti.columns
```

```
Out[ ]: Index(['survived', 'pclass', 'sex', 'age', 'sibsp', 'parch', 'fare',
'embarked', 'class', 'who', 'adult_male', 'deck', 'embark_town',
'alive', 'alone'],
dtype='object')
```

```
In [ ]: plt.figure(figsize=(15,3))
sns.lineplot(x="age", y="fare", hue="who", data=kashti)
sns.barplot(x="age", y="fare", hue="who", data=kashti)
plt.show
```

```
Out[ ]: <function matplotlib.pyplot.show(close=None, block=None)>
```

