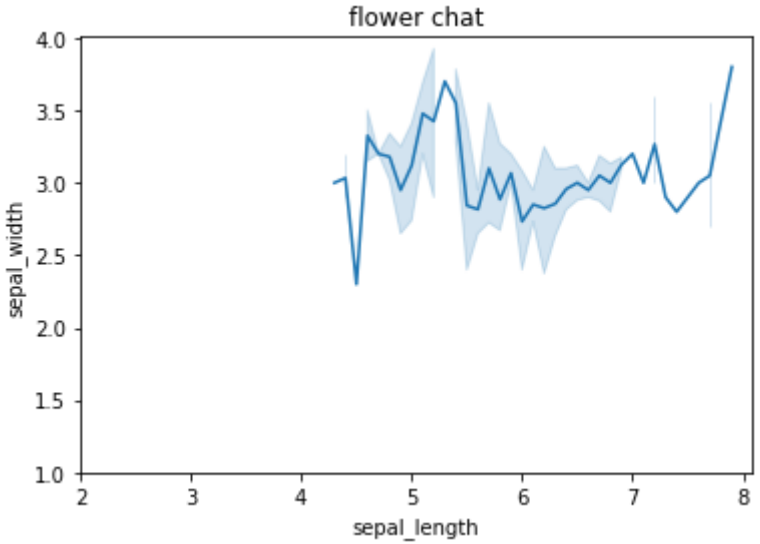
import these two libraries are very important for the data visualization

- seaborn
- numpy
- scipy
- pandas
- Matplotlib
- these libraies alrready install here

In [1]:

```
# import
import seaborn as sns
import matplotlib.pyplot as plt
 # data set_load
phool = sns.load_dataset("iris")
phool
# draw plot

sns.lineplot(x="sepal_length", y="sepal_width",data = phool) #3 dont use  space in string  it will come
plt.title("flower chat")
plt.xlim(2) # change the limit here
plt.ylim(1)
plt.show()
```



set styles

- darkgrid
- whitegrid
- dark
- white
- ticks

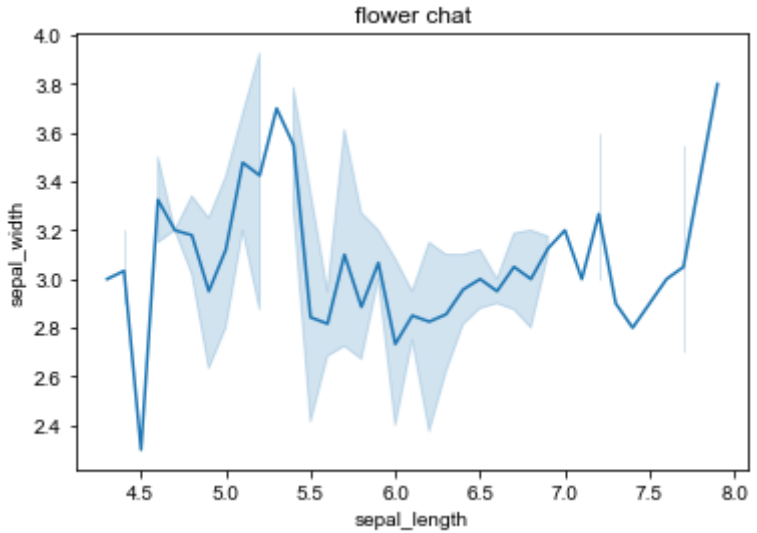
In [2]:

```
# import
import seaborn as sns

import matplotlib.pyplot as plt
set_style(style = None, rc = None)#set_style(style = None , rc= None)# resolve this error Assigment of trouble shoot
phool = sns.load_dataset("iris")
# draw plot

sns.lineplot(x="sepal_length", y="sepal_width",data = phool) #3 dont use  space in string  it will come
plt.title("flower chat")
sns.set_style("darkgrid") # use for the back groung theme
plt.show()
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
<ipython-input-2-e50674265054> in <module>
      3
      4 import matplotlib.pyplot as plt
----> 5 set_style(style = None, rc = None)#set_style(style = None , rc= None)# resolve this error Assigment of trouble shoot
      6 phool = sns.load_dataset("iris")
      7 # draw plot

NameError: name 'set_style' is not defined
```

In [3]:

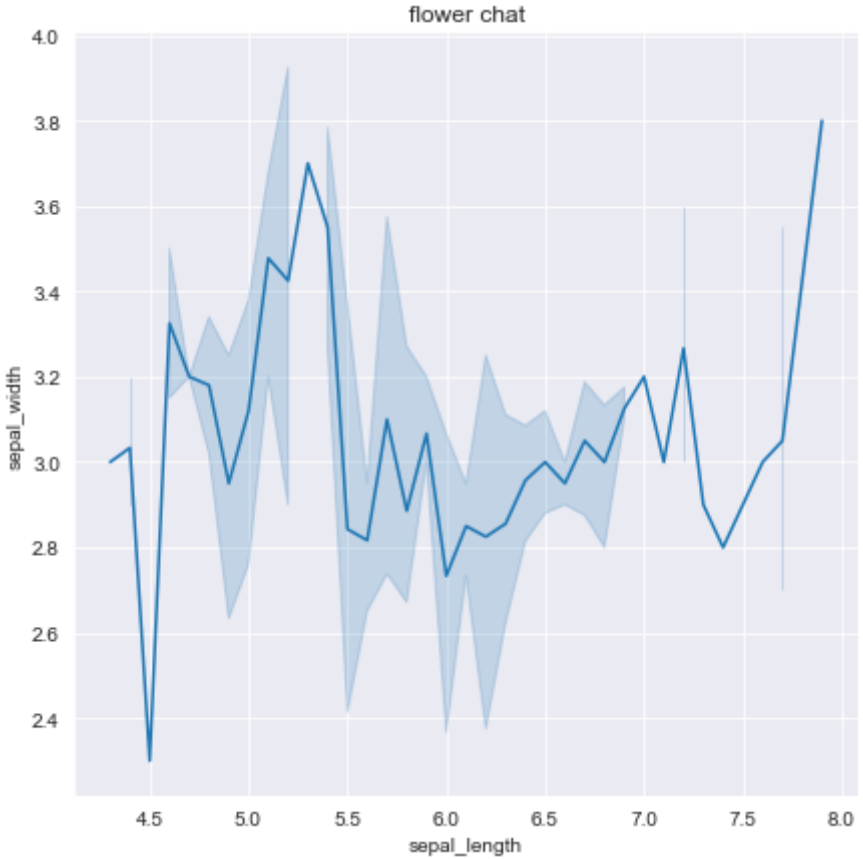
```
# import error find
import seaborn as sns

import matplotlib.pyplot as plt
sns.set_style(style = None, rc = None)#set_style(style = None , rc= None)# resolve this error Assigment of trouble shoot
phool = sns.load_dataset("iris")
# draw plot

sns.lineplot(x="sepal_length", y="sepal_width",data = phool) #3 dont use  space in string  it will come
plt.title("flower chat")
sns.set_style("darkgrid") # use for the back groung theme
plt.show()
```



Size of error

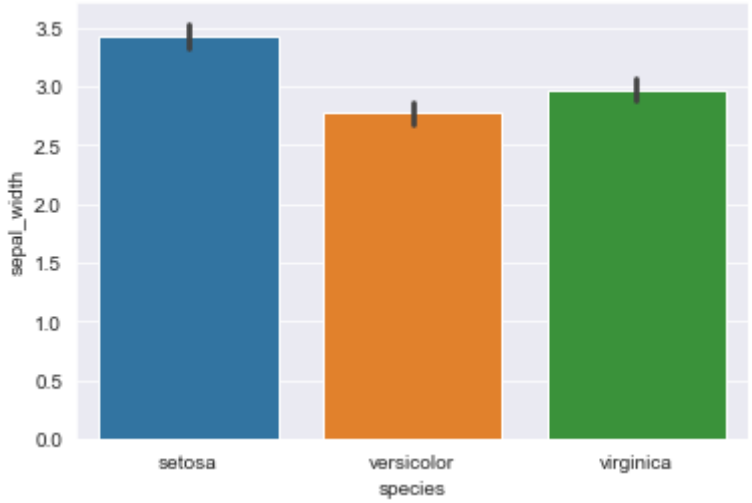
In [4]:

```
# import
import seaborn as sns
import matplotlib.pyplot as plt
# load data set
phool = sns.load_dataset("iris")

# change figure
plt.figure(figsize =(7,7)) # you can size of figure

# draw plot
sns.lineplot(x="sepal_length", y="sepal_width",data = phool) #3 dont use  space in string  it will come
plt.title("flower chat")


plt.show()
```



In [5]:

```
 #import
import seaborn as sns
import matplotlib.pyplot as plt

# load data set
phool = sns.load_dataset("iris")
phool


# draw plot
sns.barplot(x="species", y="sepal_width",data = phool) #3 dont use  space in string  it will come
plt.show()
```



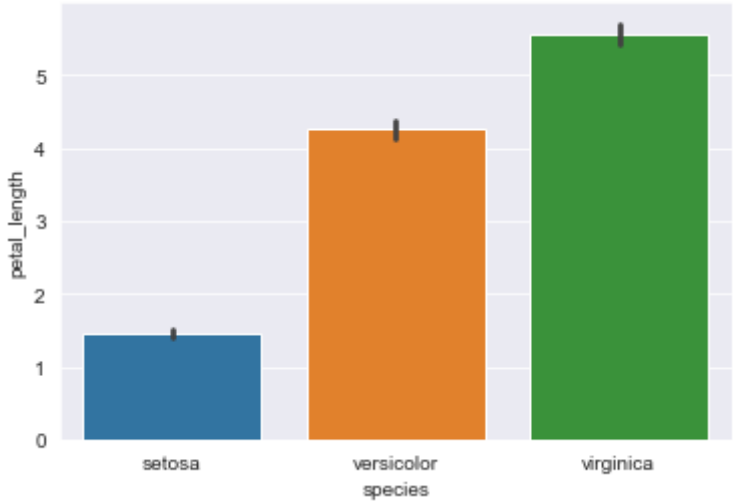
In [6]:
```
phool # data set
```

Out[6]:

	sepal_length	sepal_width	petal_length	petal_width	species
0	5.1	3.5	1.4	0.2	setosa
1	4.9	3.0	1.4	0.2	setosa
2	4.7	3.2	1.3	0.2	setosa
3	4.6	3.1	1.5	0.2	setosa
4	5.0	3.6	1.4	0.2	setosa
...	...	...	...	...	...
145	6.7	3.0	5.2	2.3	virginica
146	6.3	2.5	5.0	1.9	virginica
147	6.5	3.0	5.2	2.0	virginica
148	6.2	3.4	5.4	2.3	virginica
149	5.9	3.0	5.1	1.8	virginica

150 rows × 5 columns

In [7]:
```
 #import
import seaborn as sns
import matplotlib.pyplot as plt


# load data set
phool = sns.load_dataset("iris")




# draw plot
sns.barplot(x="species", y="petal_length",data = phool) # in change y
#plt.title("flower chat")

plt.show()
```



In [8]:
```
import seaborn as sns
import matplotlib.pyplot as plt

# load data set
kashti = sns.load_dataset("titanic")
kashti
```

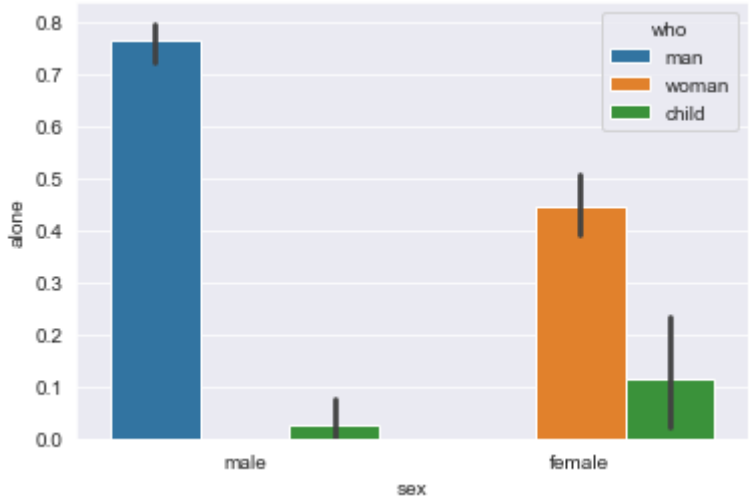
Out[8]:

	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
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
886	0	2	male	27.0	0	0	13.0000	S	Second	man	True	NaN	Southampton	no	True
887	1	1	female	19.0	0	0	30.0000	S	First	woman	False	B	Southampton	yes	True
888	0	3	female	NaN	1	2	23.4500	S	Third	woman	False	NaN	Southampton	no	False
889	1	1	male	26.0	0	0	30.0000	C	First	man	True	C	Cherbourg	yes	True
890	0	3	male	32.0	0	0	7.7500	Q	Third	man	True	NaN	Queenstown	no	True

891 rows × 15 columns

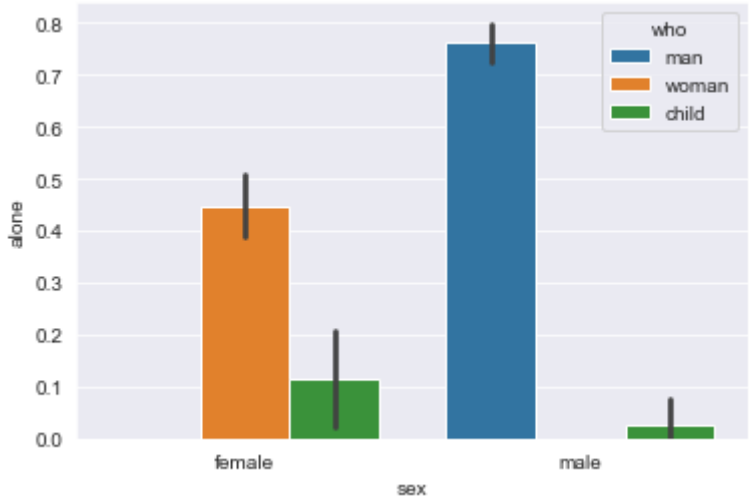
In [9]:

```
# grouping of data
import seaborn as sns
import matplotlib.pyplot as plt

# load data set
kashti = sns.load_dataset("titanic")
kashti

# draw fig
sns.barplot(x="sex", y="alone",hue = "who",data = kashti) # cahnge in info then # who--> sex then sex---> who
plt.show()
```



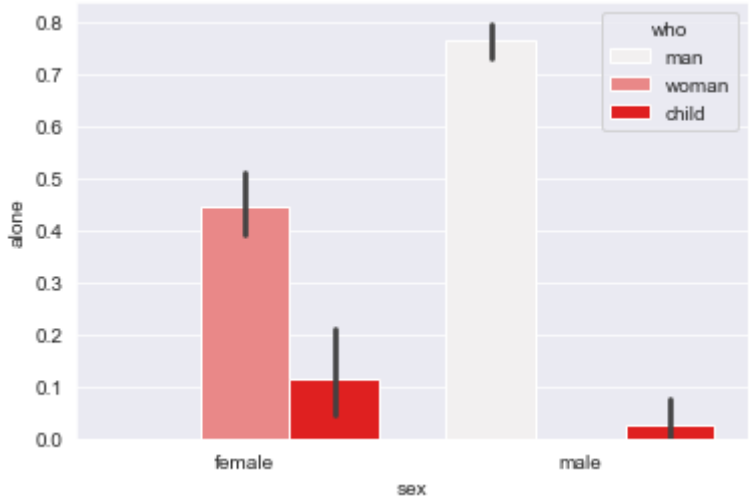
In [10]:

```
# grouping of data and order chanage
import seaborn as sns
import matplotlib.pyplot as plt

# load data set
kashti = sns.load_dataset("titanic")
kashti

# draw fig
sns.barplot(x="sex", y="alone",hue = "who",data = kashti, order=['female','male']) # cahnge in info then # who--> sex then sex--->
plt.show()
```



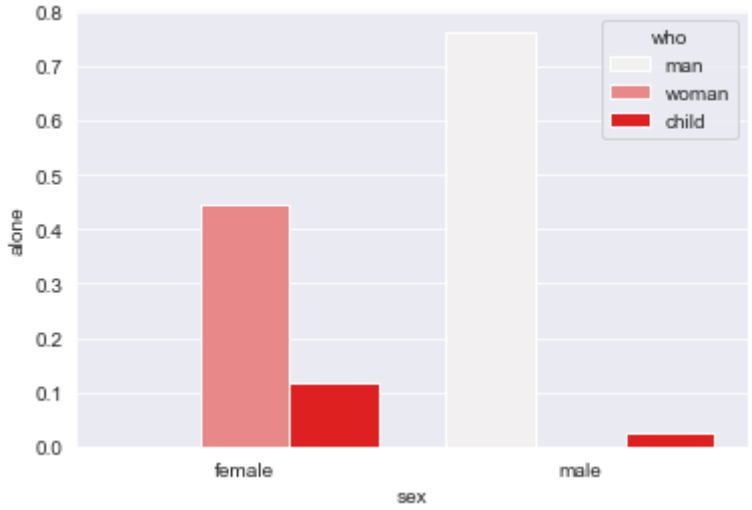
In [11]:

```
# grouping of data and order chanage  now differenet color plate
import seaborn as sns
import matplotlib.pyplot as plt

# load data set
kashti = sns.load_dataset("titanic")
kashti

# draw fig
sns.barplot(x="sex", y="alone",hue = "who",data = kashti, order=['female','male'],color= "red") # any color use here
# cahnge in info then # who--> sex then sex---> who
plt.show()
```



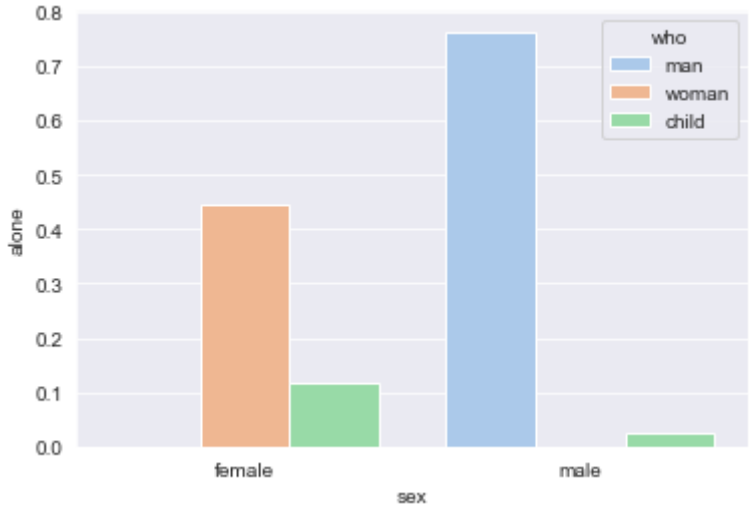
In [12]:

```
# grouping of data and order chanage  now differenet color plate--> now erroe bar remove
import seaborn as sns
import matplotlib.pyplot as plt

# load data set
kashti = sns.load_dataset("titanic")
kashti

# draw fig
sns.barplot(x="sex", y="alone",hue = "who",data = kashti, order=['female','male'],color= "red",ci=None) # ci (confidental integral
# cahnge in info then # who--> sex then sex---> who
plt.show()
```



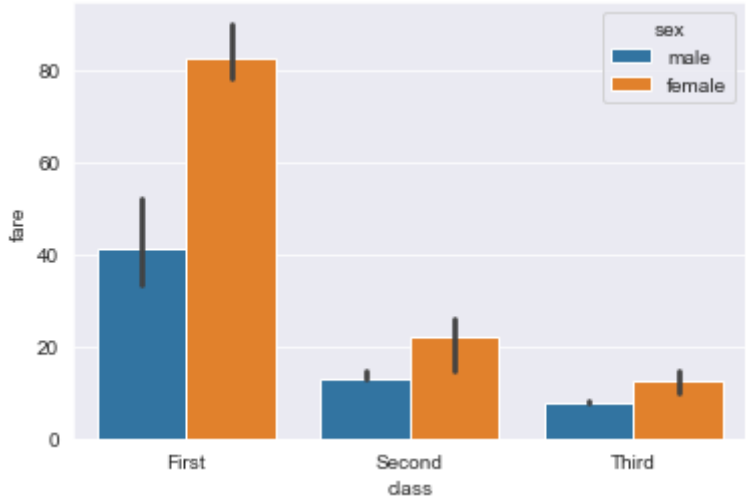
In [13]:

```
# use diff plate
# grouping of data and order chanage  now differenet color plate
import seaborn as sns
import matplotlib.pyplot as plt

# load data set
kashti = sns.load_dataset("titanic")
kashti

# draw fig
sns.barplot(x="sex", y="alone",hue = "who",data = kashti, order=['female','male'],color= "red",ci=None, palette="pastel")
# use can search on google bulit in seaborn  and take diff palatte
# any color use here
# cahnge in info then # who--> sex then sex---> who
plt.show()
```



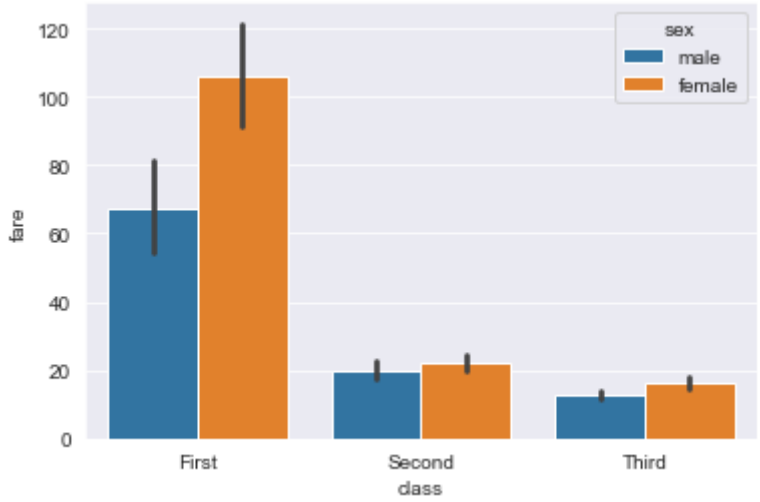
In [14]:

```
# use estimeter
import seaborn as sns
from numpy import median # import numpy
import matplotlib.pyplot as plt

# load data set
kashti = sns.load_dataset("titanic")
kashti

# draw fig
sns.barplot(x="class", y="fare",hue = "sex",data = kashti, estimator = median)


plt.show()
```



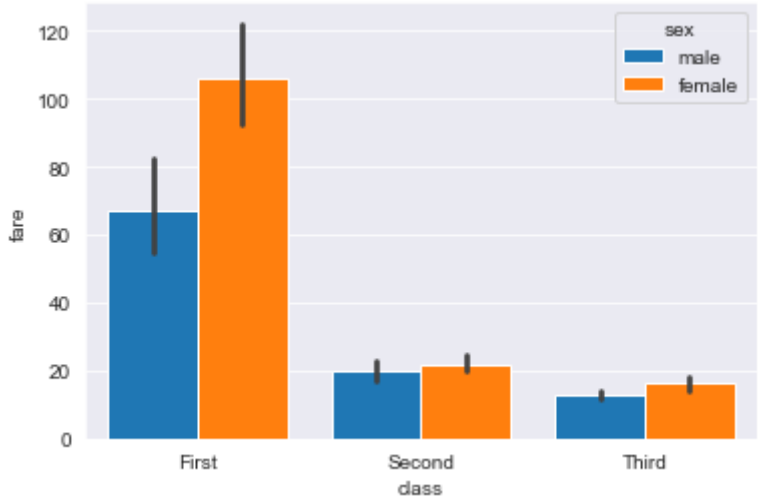
In [15]:

```
# use estimeter change median
import seaborn as sns
#import numpy # import numpy
from  numpy  import mean  # numpy for the calculataion
#import numpy
import matplotlib.pyplot as plt

# load data set
kashti = sns.load_dataset("titanic")
kashti

# draw fig
sns.barplot(x="class", y="fare",hue="sex",data=kashti, estimator=mean)
plt.show()
```



In [16]:

```
# every same but now change the color intensity by saturation
import seaborn as sns
import numpy
import matplotlib.pyplot as plt

# load data set
kashti = sns.load_dataset("titanic")
kashti

# draw fig
sns.barplot(x="class", y="fare",hue="sex",data=kashti, estimator=mean, saturation = 2) # color ful graph
plt.show()
```


sex
male
female
120
100
80
60
40
20
0
fare
First
Second
Third
class