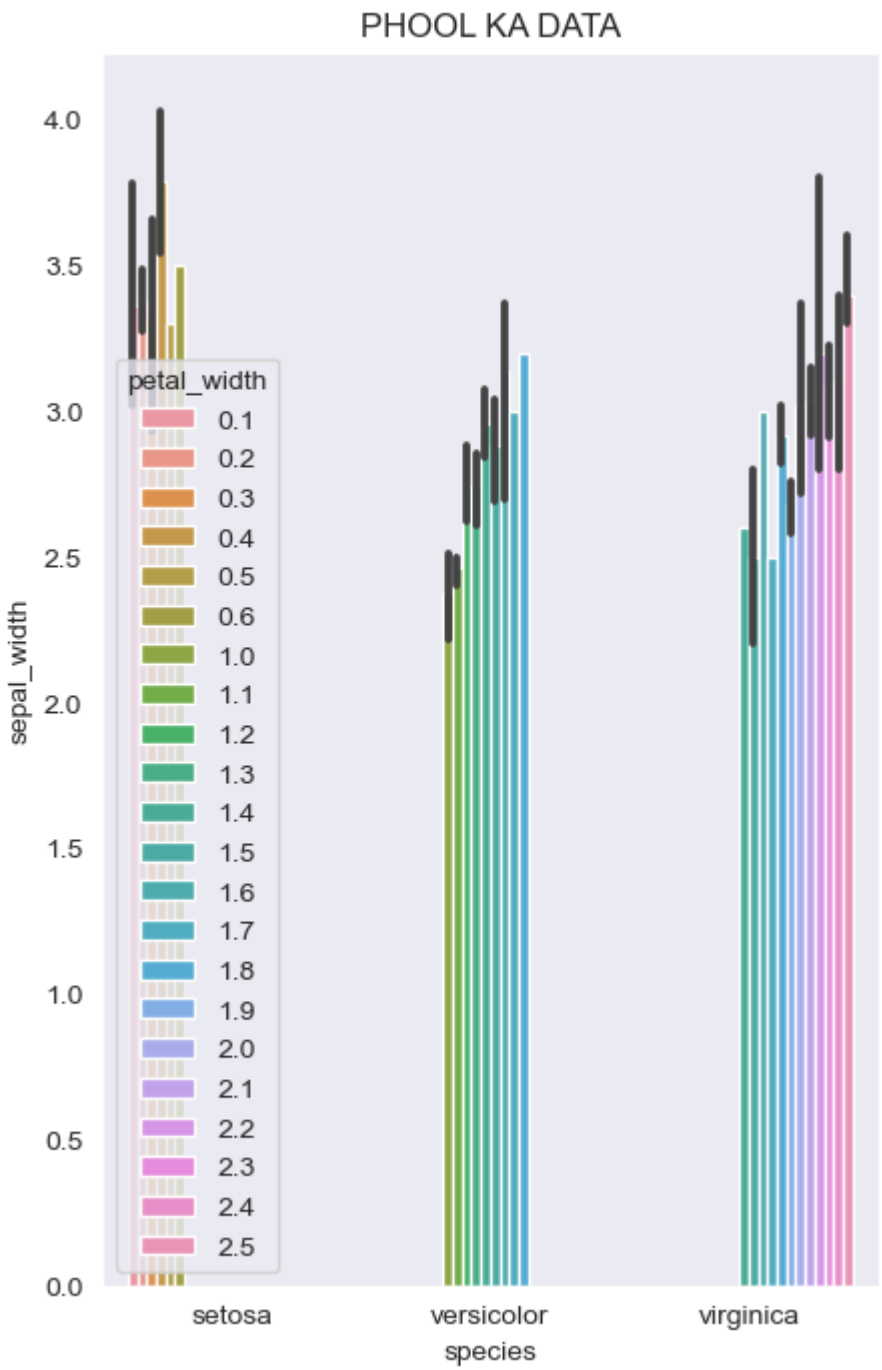
BAR PLOT

(X variable in cetagorical form & Y is in numeric)

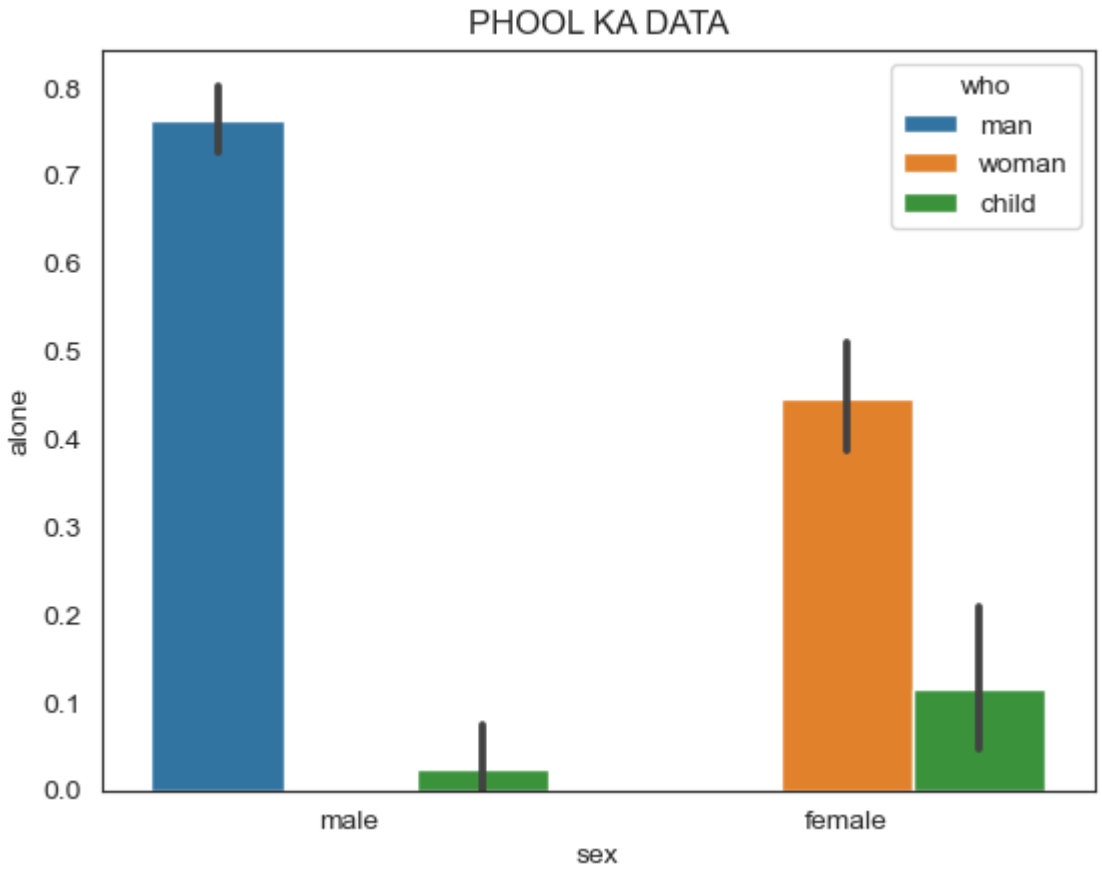
In [33]:
```
import seaborn as sns
import matplotlib.pyplot as plt

sns.set_style(style="dark")

phool=sns.load_dataset("iris")
print(phool)

plt.figure(figsize=(5,8))

P=sns.barplot(x="species", y="sepal_width", data=phool, hue="petal_width")
P.set_title("PHOOL KA DATA")
plt.show()
```

```
     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 x 5 columns]
```



In [22]:
```
import seaborn as sns
import matplotlib.pyplot as plt

sns.set_style(style="white")

khashti = sns.load_dataset("titanic")
print(khashti)

P=sns.barplot(x="sex", y="alone", hue="who", data=khashti)
P.set_title("PHOOL KA DATA")
plt.show()
```

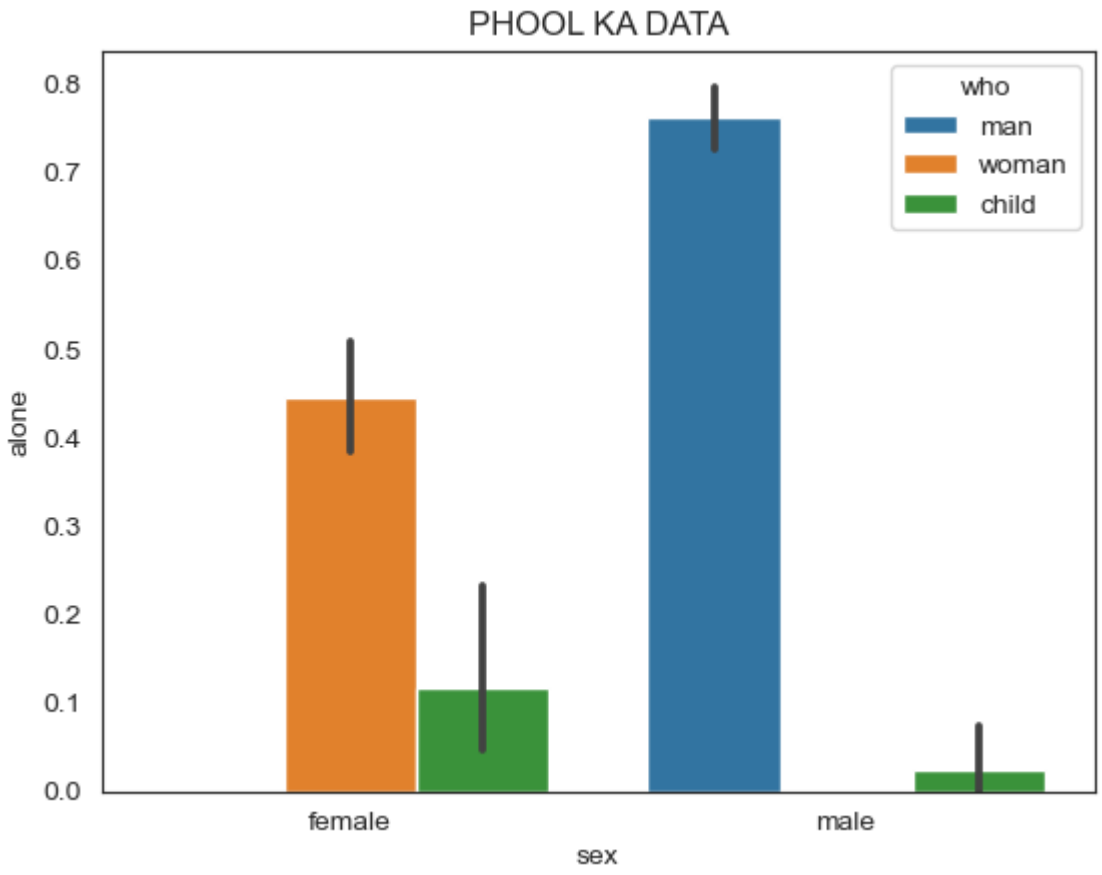
```
     survived  pclass     sex   age  sibsp  parch     fare embarked   class  \
0           0       3    male  22.0      1      0   7.2500        S   Third
1           1       1  female  38.0      1      0  71.2833        C   First
2           1       3  female  26.0      0      0   7.9250       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

       who  adult_male deck  embark_town alive  alone
0      man        True  NaN  Southampton    no  False
1    woman       False    C    Cherbourg   yes  False
2    woman       False  NaN  Southampton   yes   True
3    woman       False    C  Southampton   yes  False
4      man        True  NaN  Southampton    no   True
..     ...         ...  ...          ...   ...    ...
886    man        True  NaN  Southampton    no   True
887  woman       False    B  Southampton   yes   True
888  woman       False  NaN  Southampton    no  False
889    man        True    C    Cherbourg   yes   True
890    man        True  NaN   Queenstown    no   True

[891 rows x 15 columns]
```



SET ORDER

In [25]:
```
import seaborn as sns
import matplotlib.pyplot as plt

sns.set_style(style="white")

khashti = sns.load_dataset("titanic")
print(khashti)

P=sns.barplot(x="sex", y="alone", hue="who", data=khashti, order=["female", "male"])
P.set_title("PHOOL KA DATA")
plt.show()
```

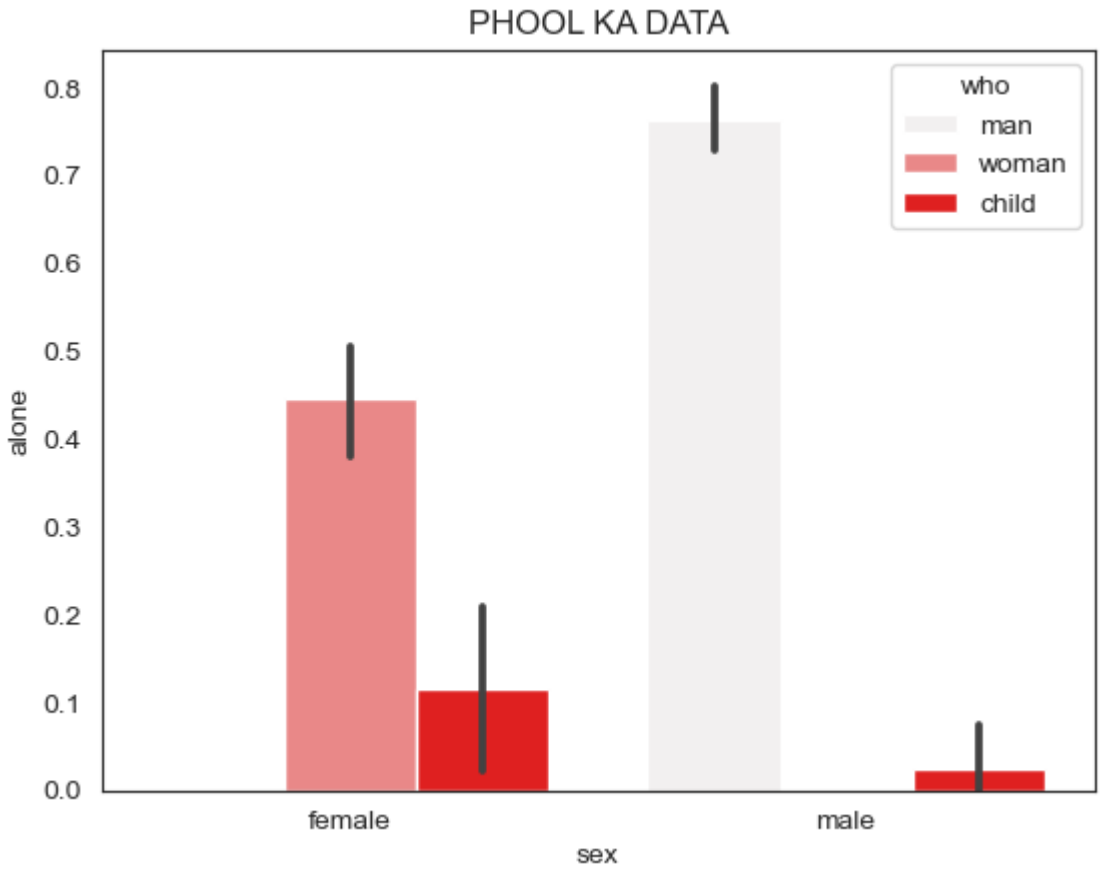
```
     survived  pclass     sex   age  sibsp  parch     fare embarked   class  \
0           0       3    male  22.0      1      0   7.2500        S   Third
1           1       1  female  38.0      1      0  71.2833        C   First
2           1       3  female  26.0      0      0   7.9250       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

       who  adult_male deck  embark_town alive  alone
0      man        True  NaN  Southampton    no  False
1    woman       False    C    Cherbourg   yes  False
2    woman       False  NaN  Southampton   yes   True
3    woman       False    C  Southampton   yes  False
4      man        True  NaN  Southampton    no   True
..     ...         ...  ...          ...   ...    ...
886    man        True  NaN  Southampton    no   True
887  woman       False    B  Southampton   yes   True
888  woman       False  NaN  Southampton    no  False
889    man        True    C    Cherbourg   yes   True
890    man        True  NaN   Queenstown    no   True

[891 rows x 15 columns]
```



SET COLOR

In [26]:
```
import seaborn as sns
import matplotlib.pyplot as plt

sns.set_style(style="white")

khashti = sns.load_dataset("titanic")
print(khashti)

P=sns.barplot(x="sex", y="alone", hue="who", data=khashti, order=["female", "male"], c
P.set_title("PHOOL KA DATA")
plt.show()
```

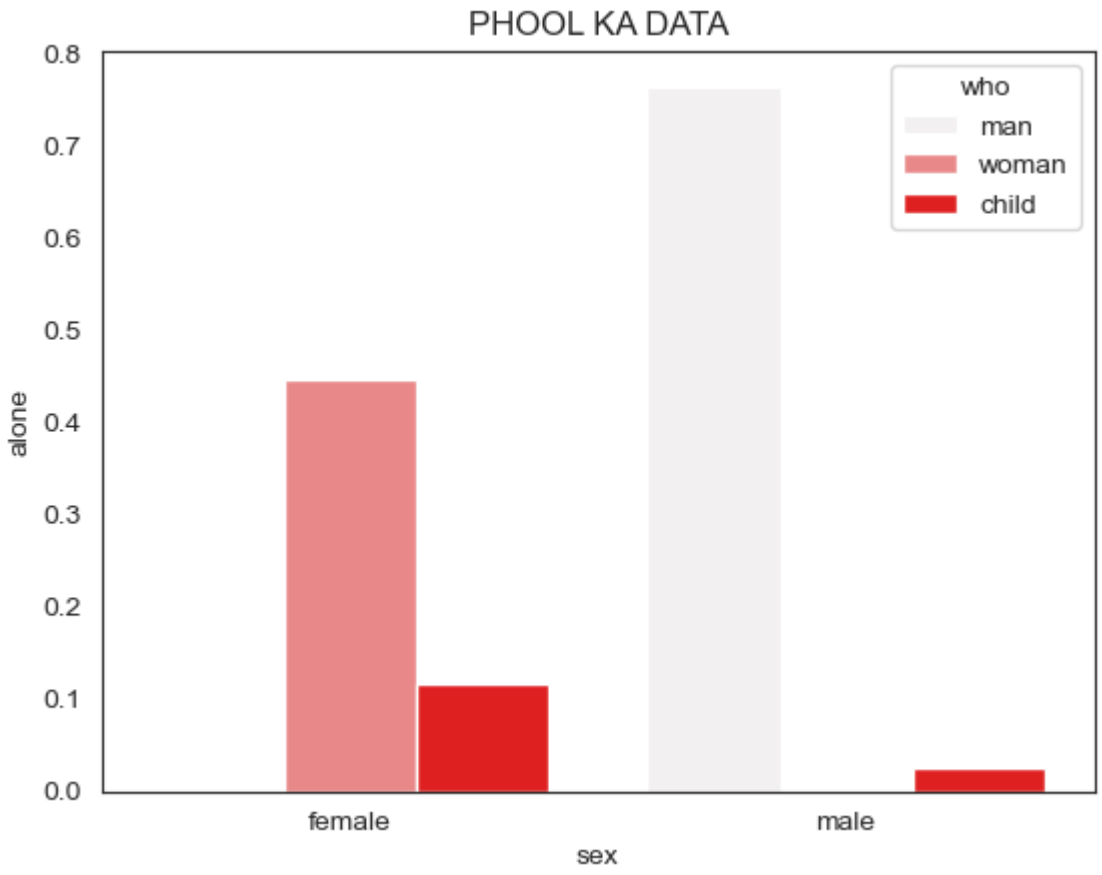
```
     survived  pclass     sex   age  sibsp  parch     fare embarked   class  \
0           0       3    male  22.0      1      0   7.2500        S   Third
1           1       1  female  38.0      1      0  71.2833        C   First
2           1       3  female  26.0      0      0   7.9250       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

       who  adult_male deck  embark_town alive  alone
0      man        True  NaN  Southampton    no  False
1    woman       False    C    Cherbourg   yes  False
2    woman       False  NaN  Southampton   yes   True
3    woman       False    C  Southampton   yes  False
4      man        True  NaN  Southampton    no   True
..     ...         ...  ...          ...   ...    ...
886    man        True  NaN  Southampton    no   True
887  woman       False    B  Southampton   yes   True
888  woman       False  NaN  Southampton    no  False
889    man        True    C    Cherbourg   yes   True
890    man        True  NaN   Queenstown    no   True

[891 rows x 15 columns]
```



REMOVE ERROR BARS

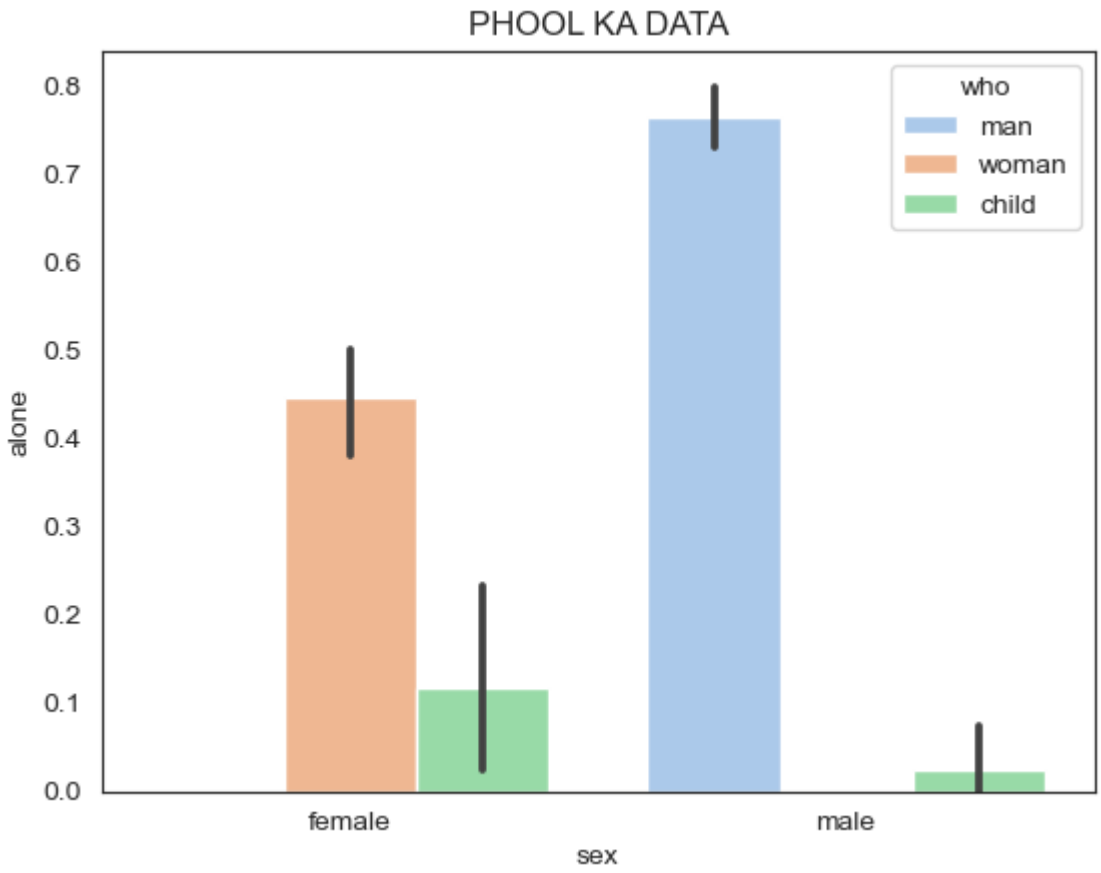
In [28]:
```
import seaborn as sns
import matplotlib.pyplot as plt

sns.set_style(style="white")

khashti = sns.load_dataset("titanic")
print(khashti)

P=sns.barplot(x="sex", y="alone", hue="who", data=khashti, order=["female", "male"], c
P.set_title("PHOOL KA DATA")
plt.show()
```

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

       who  adult_male deck  embark_town alive  alone
0      man        True  NaN  Southampton    no  False
1    woman       False    C    Cherbourg   yes  False
2    woman       False  NaN  Southampton   yes   True
3    woman       False    C  Southampton   yes  False
4      man        True  NaN  Southampton    no   True
..     ...         ...  ...          ...   ...    ...
886    man        True  NaN  Southampton    no   True
887  woman       False    B  Southampton   yes   True
888  woman       False  NaN  Southampton    no  False
889    man        True    C    Cherbourg   yes   True
890    man        True  NaN   Queenstown    no   True

[891 rows x 15 columns]
```



DIFFERENT PALLETE

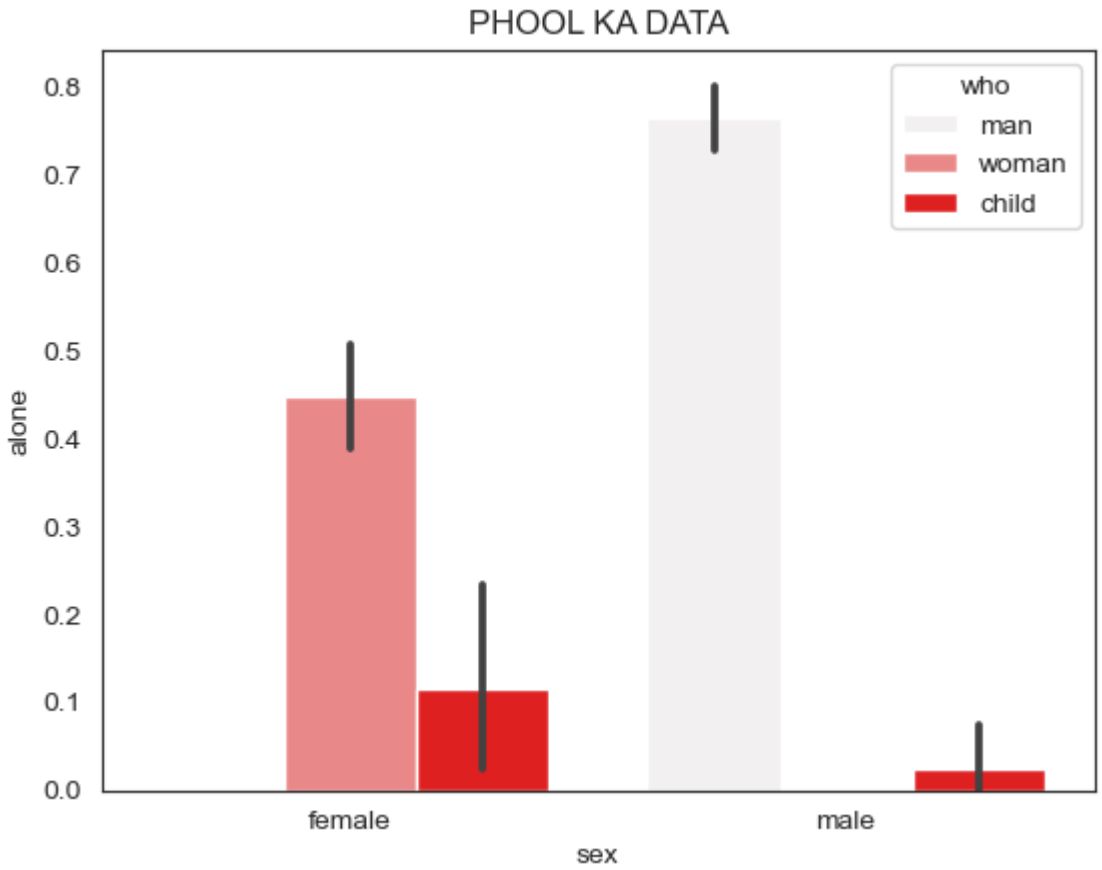
In [30]:
```
import seaborn as sns
import matplotlib.pyplot as plt

sns.set_style(style="white")

khashti = sns.load_dataset("titanic")
# print(khashti)

P=sns.barplot(x="sex", y="alone", hue="who", data=khashti, order=["female", "male"], c
P.set_title("PHOOL KA DATA")
plt.show()
```



APPLY ESTIMATOR

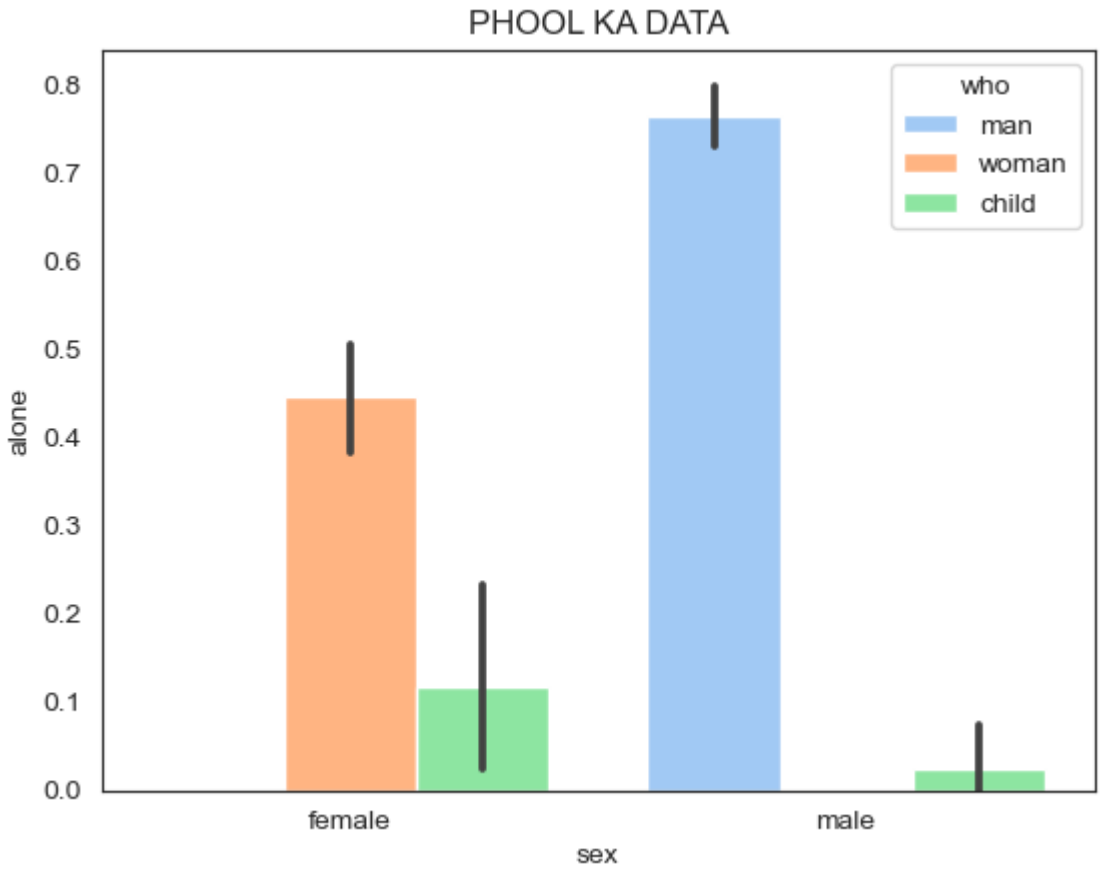
In [37]:
```
import seaborn as sns
import matplotlib.pyplot as plt
import numpy

sns.set_style(style="white")

khashti = sns.load_dataset("titanic")
print(khashti)

P=sns.barplot(x="sex", y="alone", hue="who", data=khashti, order=["female", "male"], c
P.set_title("PHOOL KA DATA")
plt.show()
```

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

       who  adult_male deck  embark_town alive  alone
0      man        True  NaN  Southampton    no  False
1    woman       False    C    Cherbourg   yes  False
2    woman       False  NaN  Southampton   yes   True
3    woman       False    C  Southampton   yes  False
4      man        True  NaN  Southampton    no   True
..     ...         ...  ...          ...   ...    ...
886    man        True  NaN  Southampton    no   True
887  woman       False    B  Southampton   yes   True
888  woman       False  NaN  Southampton    no  False
889    man        True    C    Cherbourg   yes   True
890    man        True  NaN   Queenstown    no   True

[891 rows x 15 columns]
```



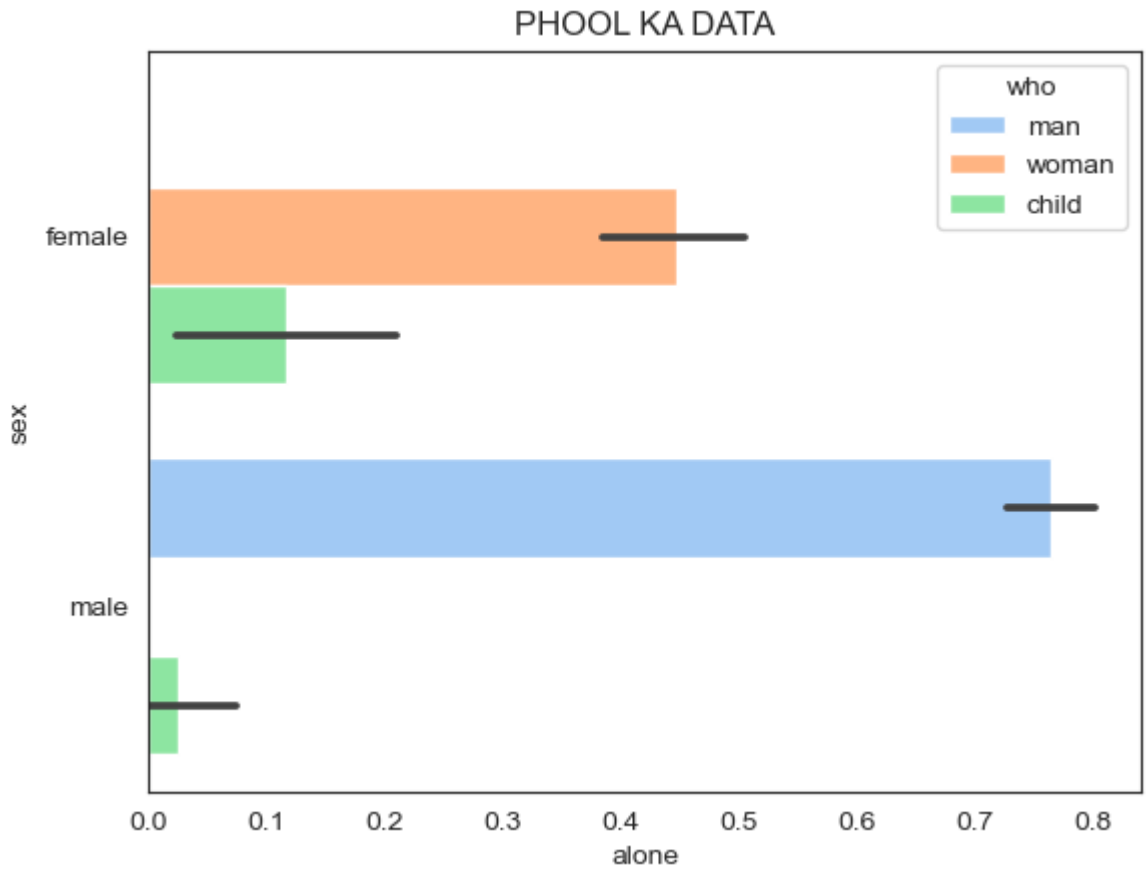
SET SATURATION

In [40]:
```
import seaborn as sns
import matplotlib.pyplot as plt

sns.set_style(style="white")

khashti = sns.load_dataset("titanic")
# print(khashti)

P=sns.barplot(x="sex", y="alone", hue="who", data=khashti, order=["female", "male"], c
P.set_title("PHOOL KA DATA")
plt.show()
```



CHANGE GRAPH SHAPE HORIZONTAL

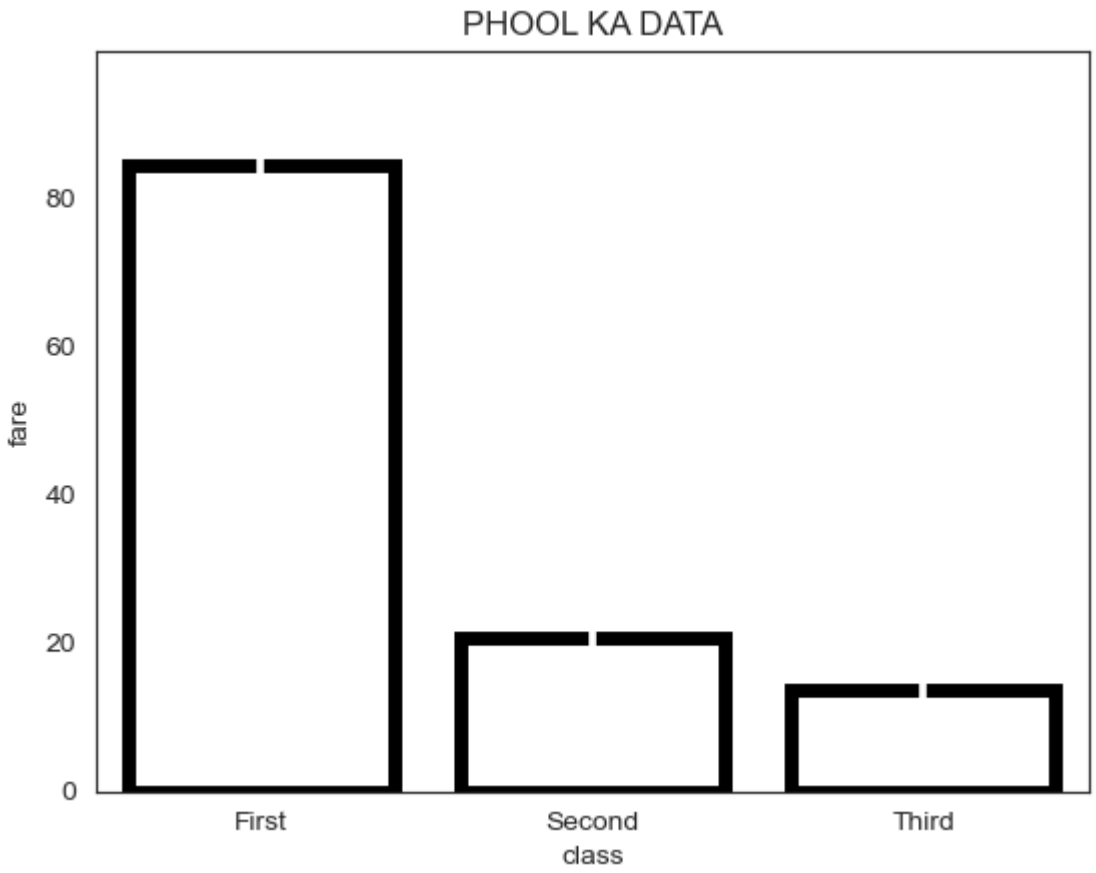
In [41]:
```
import seaborn as sns
import matplotlib.pyplot as plt

sns.set_style(style="white")

khashti = sns.load_dataset("titanic")
# print(khashti)

P=sns.barplot(x="alone", y="sex", hue="who", data=khashti, order=["female", "male"], c
P.set_title("PHOOL KA DATA")
plt.show()
```



LINE WIDTH/ FACE COLOR/ ERROR COLOR/

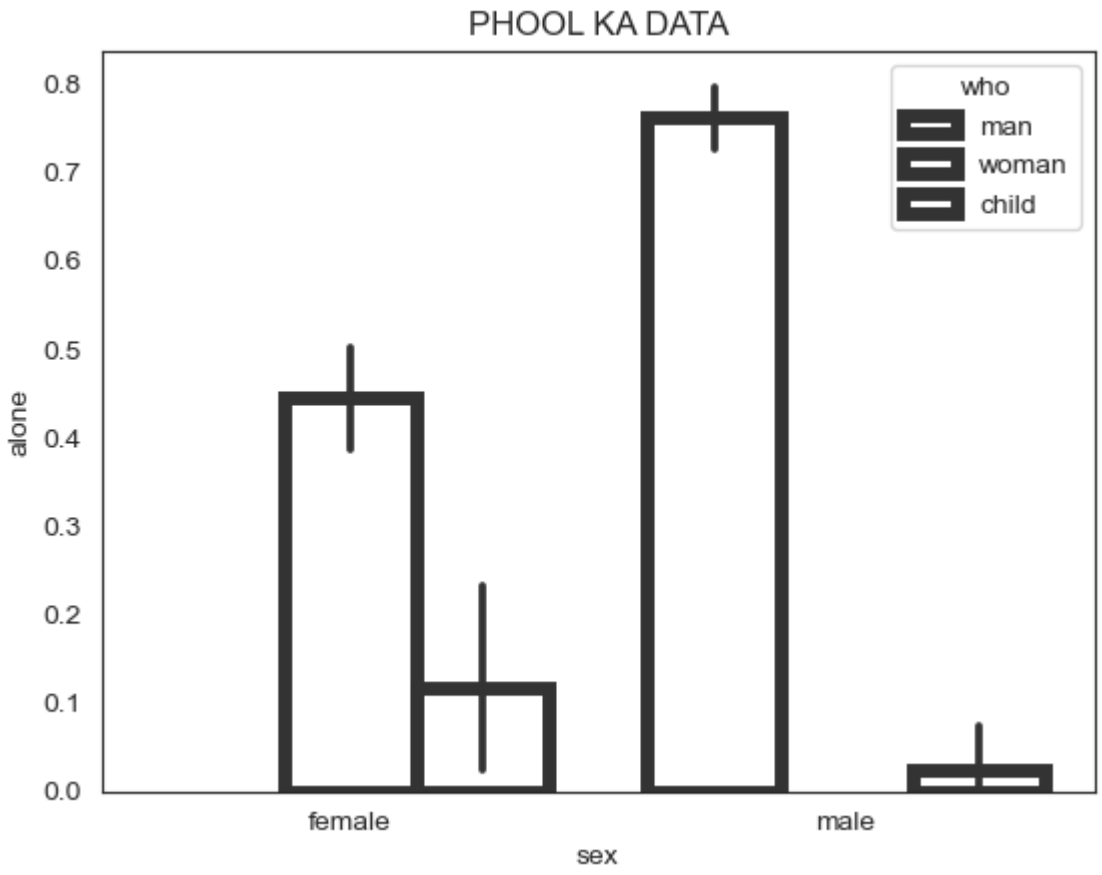
EDGE COLOR (1 for white & 0 for black)

In [58]:
```
import seaborn as sns
import matplotlib.pyplot as plt
import numpy

sns.set_style(style="white")

khashti = sns.load_dataset("titanic")
# print(khashti)

P=sns.barplot(x="class", y="fare", data=khashti, linewidth=5, facecolor=(1, 1, 1, 0),
P.set_title("PHOOL KA DATA")
plt.show()
```



In [52]:
```
import seaborn as sns
import matplotlib.pyplot as plt

sns.set_style(style="white")

khashti = sns.load_dataset("titanic")
# print(khashti)

P=sns.barplot(x="sex", y="alone", hue="who", data=khashti, order=["female", "male"], c
P.set_title("PHOOL KA DATA")
```

Out[52]:
```
Text(0.5, 1.0, 'PHOOL KA DATA')
```


PHOOL KA DATA
who
man
woman
child
alone
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
female
male
sex

In [ ]: