Assignment 2-Day 4

Question 1: Why more than one variables are not being used in x axis

Answer

The box plot mainly plots one variable of dataset on x axis.

Practice

In [6]:
```
import seaborn as sns
import numpy
import matplotlib.pyplot as plt
import pandas as pd

clean_data=pd.read_excel("Cleaned_Dataset.xlsx")
```

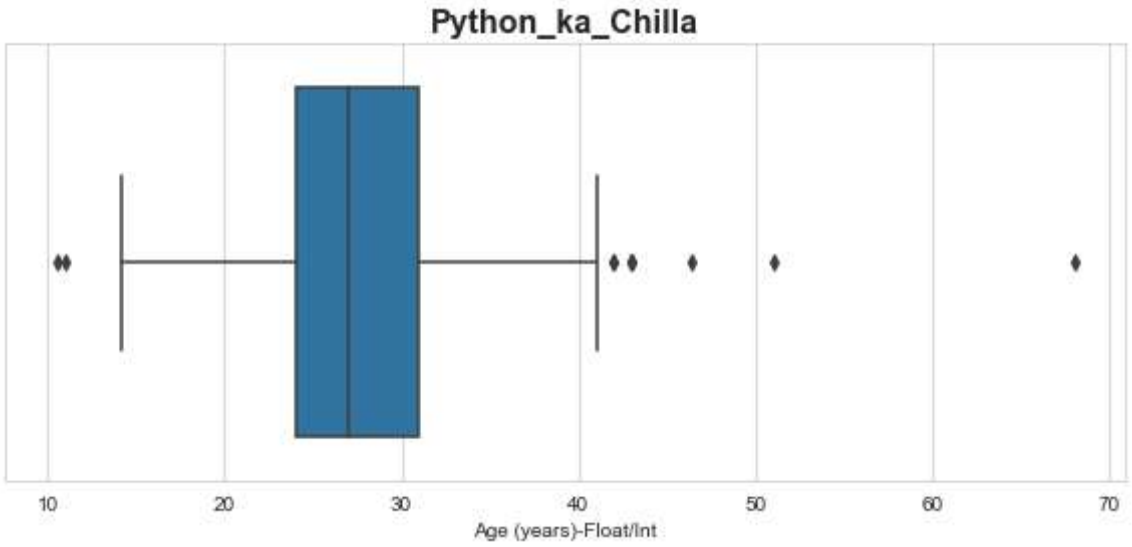
In [84]:
```
clean_data.head(3)
```

Out[84]:

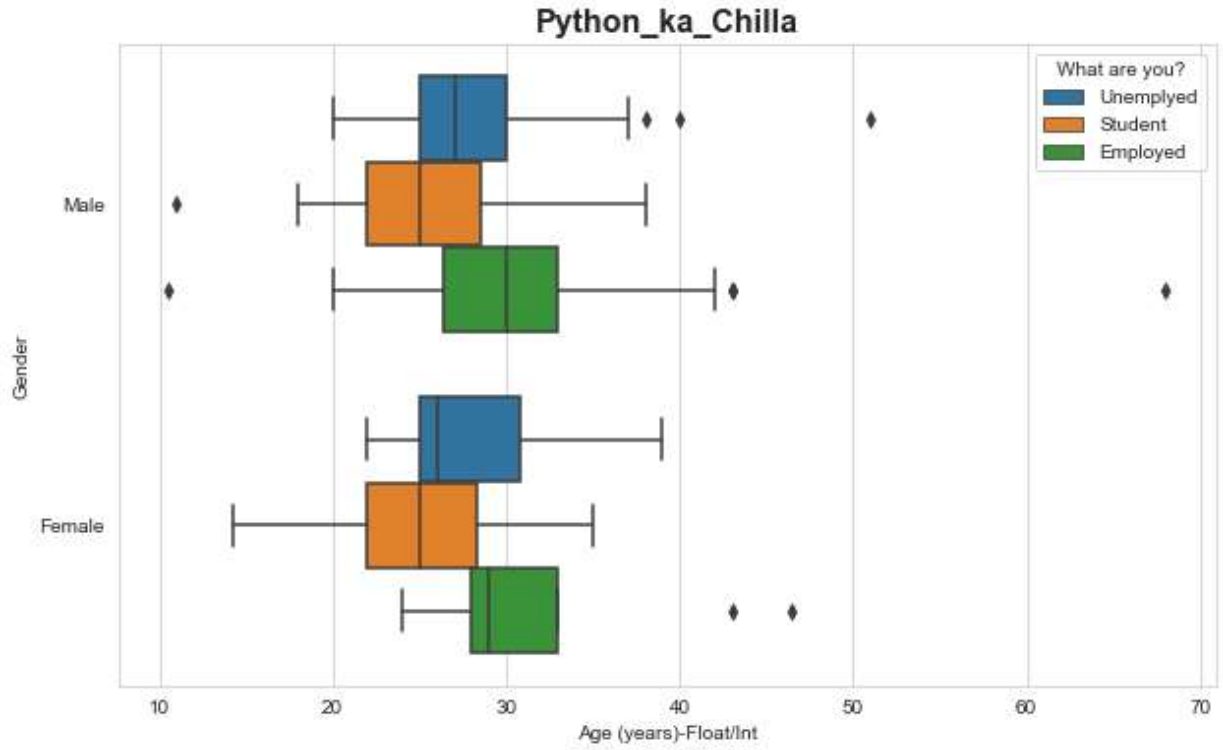
	Gender	Location	Age	Qualification_completed	field_of_study	Purpose_for_chilla	What are you?	I g
0	Male	Pakistan	36-40	Masters	Natural Sciences	to boost my skill set	Unemplyed	
1	Male	Pakistan	26-30	Bachelors	CS/IT	to boost my skill set	Student	
2	Male	Pakistan	31-35	Masters	Enginnering	Switch my field of study	Employed	

3 rows × 23 columns

In [39]:
```
plt.figure(figsize=(10,4)) # setting figure size
sns.set_style("whitegrid") # setting tyle
sns.boxplot(x="Age (years)-Float/Int", data=clean_data)
plt.title("Python_ka_Chilla", weight="bold", size=16)
plt.show()
```



In [85]:
```
plt.figure(figsize=(10,6)) # setting figure size
sns.set_style("whitegrid") # setting tyle
sns.boxplot(x="Age (years)-Float/Int", y= "Gender", hue="What are you?", data=cle
plt.title("Python_ka_Chilla", weight="bold", size=16)
plt.show()
```

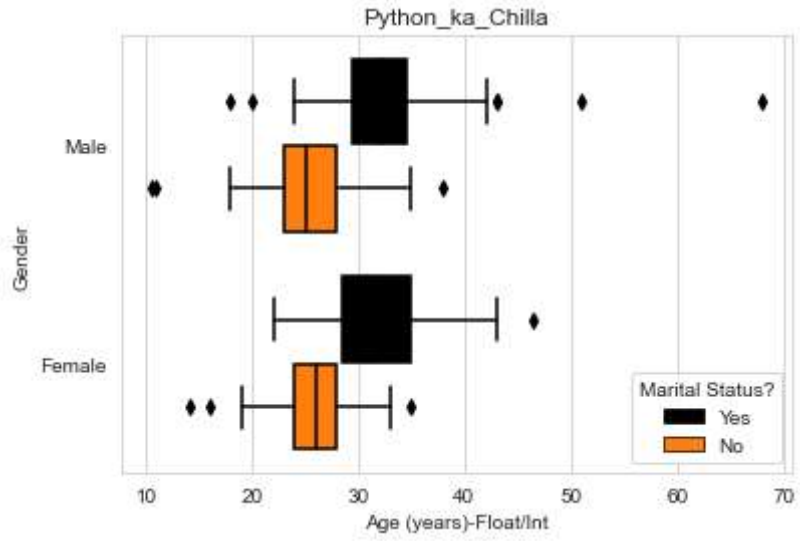


Question 2: How to change hue color mannually?

Answer

Method 1

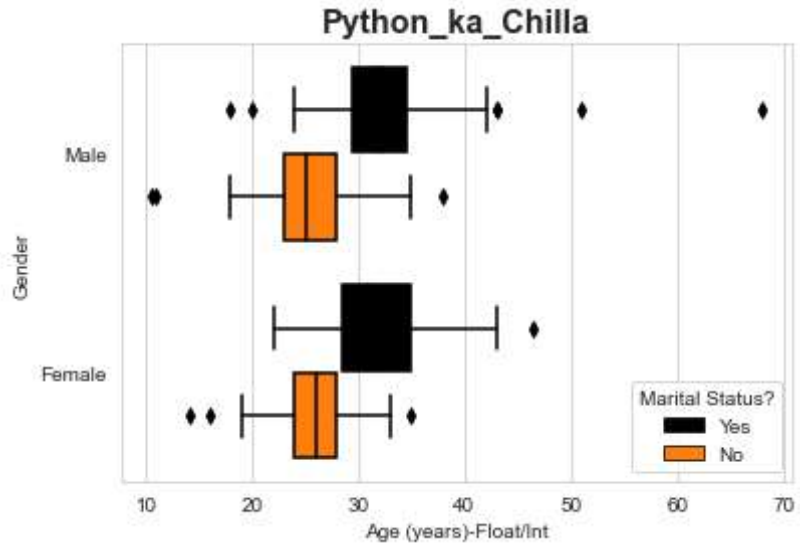
In [59]:
```
sns.boxplot(x="Age (years)-Float/Int", y= "Gender", hue="Marital Status?",
            data=clean_data, saturation=1, palette=["k", "C1"])
plt.title("Python_ka_Chilla")
plt.show()
```



Method 2

This method is proper than method 1 like when we have different graphs containing some common and some different variables, we do not need to describe palette again and again, just declare it once. And in this same variables have same colors that is needed.

In [65]:
```
plt.figure()
p= {"Yes":"k", "No":"C1"}
sns.boxplot(x="Age (years)-Float/Int", y= "Gender", hue="Marital Status?",
            data=clean_data, saturation=1, palette=p)
plt.title("Python_ka_Chilla", weight="bold", size=16)
plt.show()
```



Question 3- What facecolor combination tells us?

Answer

Facecolor has four digits in range of 0-1; facecolor(Red,Blue,Green,Opacity). Combining red, blue and green colors are formed and last digits manages the opacity of the color.

Question 4- Why v variable in Orient was Showing Error?

Answer

For orient it is necessary that; for horizontal (h) x axis should be numeric and for vertical (v) y axis should be numeric.

Proof

In [80]:
```
plt.figure(figsize=(15,6))
p={"Yes":"k", "No":"C1"}
sns.boxplot(x="How many hours you code a day? (int) e.g: 5,4,3", y= "Gender", hue
            data=clean_data, saturation=1, palette=p, dodge=False)
plt.xlabel("Hours", size=13, weight="bold")
plt.ylabel("Gender", size=13, weight="bold")
plt.title("Python_ka_Chilla", weight="bold", size=16)
plt.show()
```