

# First Step to read data from the file

## import libraries

- import pandas
- import seaborn
- import matplotlib

```
In [1]: import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt
day5=pd.read_csv("C:/Users/Yasir Mehmood/Downloads/Python Programs/Chilla_data2_for_plo
day5
```

Out[1]:

	Gender	Location	Age	Qualification_completed	field_of_study	Purpose_for_chilla	What are you?	Blog
0	Male	Pakistan	36-40	Masters	Natural Sciences	to boost my skill set	Unemployed	
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	Female	Pakistan	31-35	Masters	CS/IT	to boost my skill set	Employed	
4	Female	Pakistan	26-30	Masters	Enginnering	to boost my skill set	Student	
...	...	...	...	...	...	...	...	...
370	Male	Pakistan	26-30	Masters	Enginnering	to boost my skill set	Employed	
371	Male	Pakistan	31-35	Bachelors	Enginnering	to boost my skill set	Employed	
372	Male	Pakistan	21-25	Bachelors	CS/IT	to boost my skill set	Employed	
373	Male	Pakistan	26-30	Masters	Enginnering	to boost my skill set	Employed	
374	Female	Pakistan	31-35	Masters	Mathematics	Switch my field of study	Unemployed	

375 rows × 23 columns

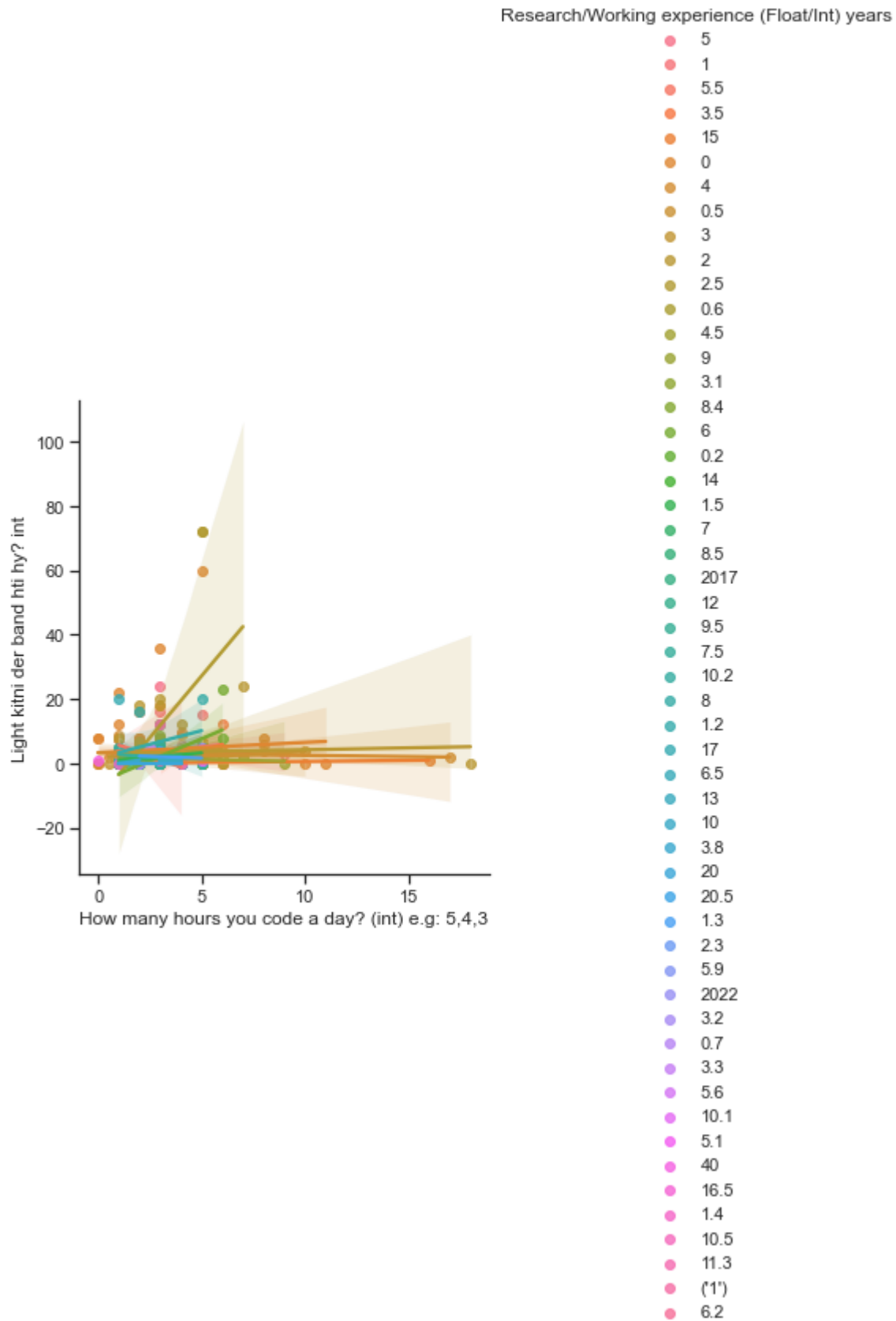
## 1- Using Implot code on my own data and show graphically behaviour

In [7]:

```
import seaborn as sns
sns.set_theme(style="ticks")

# Load the example dataset for Anscombe's quartet
day5=pd.read_csv("C:/Users/Yasir Mehmood/Downloads/Python Programs/Chilla_data2_for_plo
# Show the results of a linear regression within each dataset
sns.lmplot(x="How many hours you code a day? (int) e.g: 5,4,3", y="Light kitni der band
           hue="Research/Working experience (Float/Int) years", data=day5)
```

Out[7]: <seaborn.axisgrid.FacetGrid at 0x18fadca1af0>



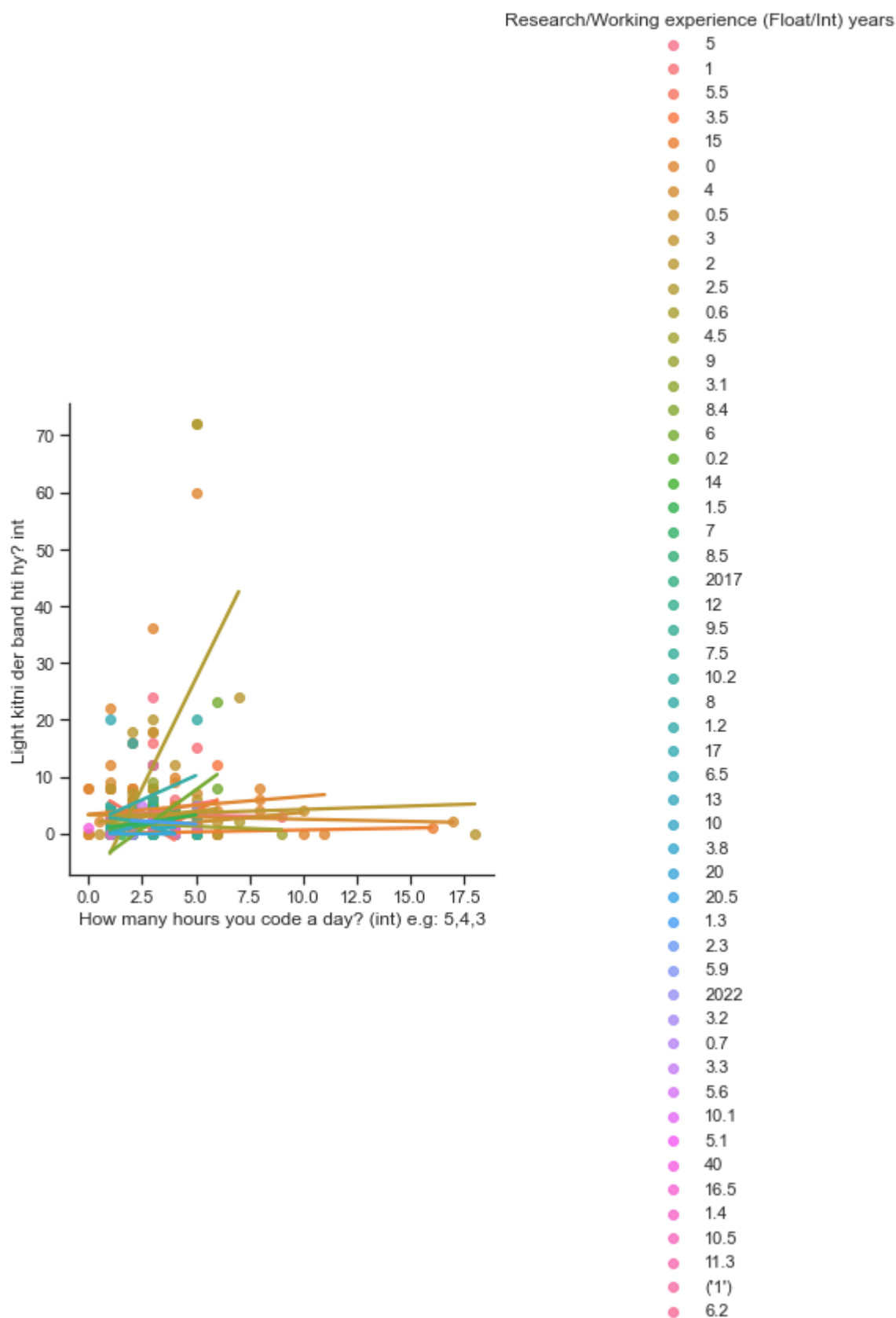
In [8]:

```
import seaborn as sns
sns.set_theme(style="ticks")

# Load the example dataset for Anscombe's quartet
day5=pd.read_csv("C:/Users/Yasir Mehmood/Downloads/Python Programs/Chilla_data2_for_plo")
# Show the results of a linear regression within each dataset
```

```
sns.lmplot(x="How many hours you code a day? (int) e.g: 5,4,3", y="Light kitni der band",
           hue="Research/Working experience (Float/Int) years",ci=None, data=day5)
```

Out[8]: <seaborn.axisgrid.FacetGrid at 0x18fba54b520>

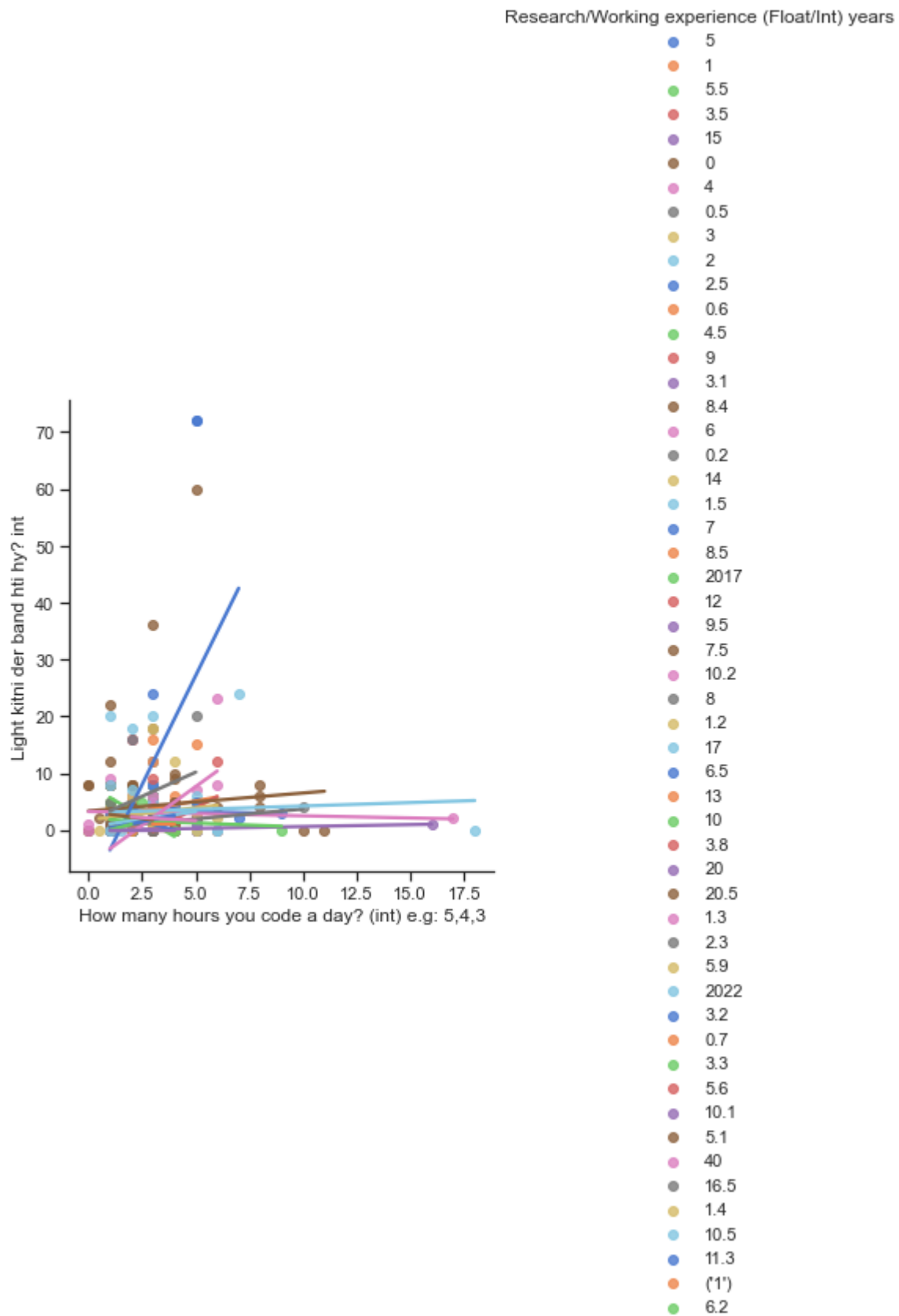


In [10]: `import seaborn as sns`

```
sns.set_theme(style="ticks")

# Load the example dataset for Anscombe's quartet
day5=pd.read_csv("C:/Users/Yasir Mehmood/Downloads/Python Programs/Chilla_data2_for_plo
# Show the results of a linear regression within each dataset
sns.lmplot(x="How many hours you code a day? (int) e.g: 5,4,3", y="Light kitni der band
          hue="Research/Working experience (Float/Int) years",ci=None, palette="muted"
```

Out[10]: <seaborn.axisgrid.FacetGrid at 0x18fbabcce20>

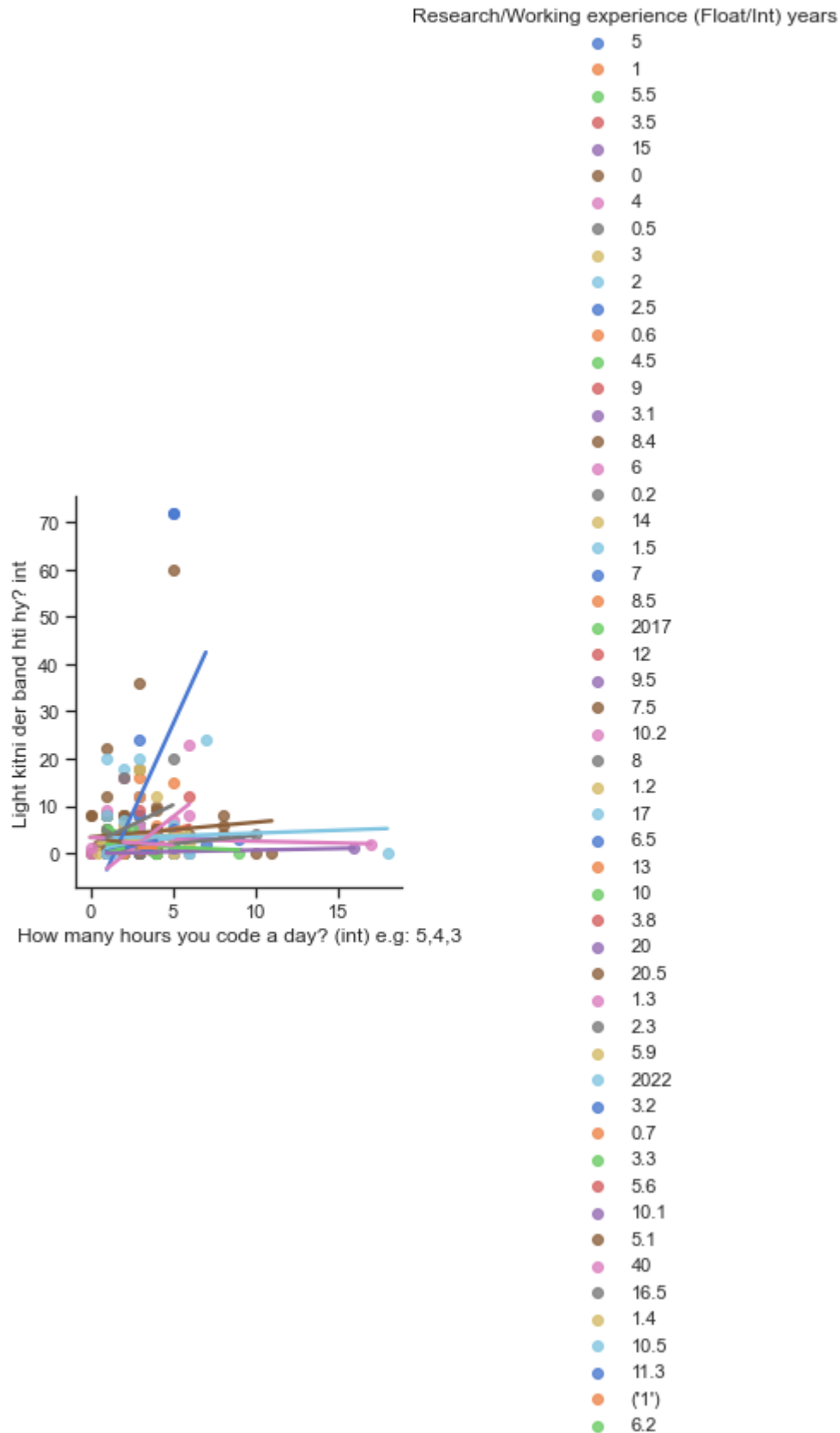


```
In [11]: import seaborn as sns
sns.set_theme(style="ticks")

# Load the example dataset for Anscombe's quartet
day5=pd.read_csv("C:/Users/Yasir Mehmood/Downloads/Python Programs/Chilla_data2_for_plo
# Show the results of a linear regression within each dataset
```

```
sns.lmplot(x="How many hours you code a day? (int) e.g: 5,4,3", y="Light kitni der band  
hue="Research/Working experience (Float/Int) years",ci=None, palette="muted")
```

Out[11]: <seaborn.axisgrid.FacetGrid at 0x18fba39b910>



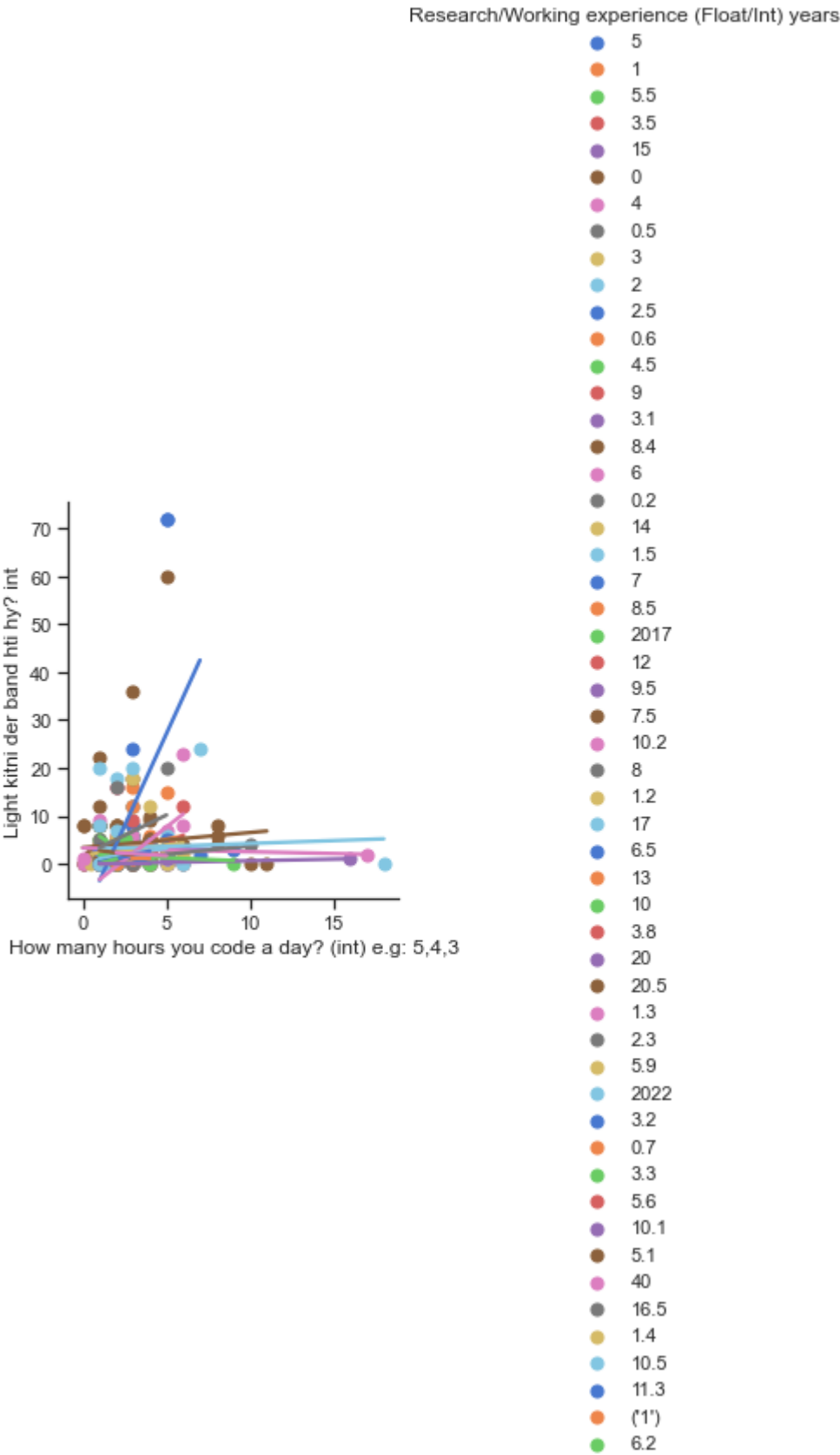
In [12]: `import seaborn as sns`

```
sns.set_theme(style="ticks")

# Load the example dataset for Anscombe's quartet
day5=pd.read_csv("C:/Users/Yasir Mehmood/Downloads/Python Programs/Chilla_data2_for_plo
# Show the results of a linear regression within each dataset
sns.lmplot(x="How many hours you code a day? (int) e.g: 5,4,3", y="Light kitni der band
          hue="Research/Working experience (Float/Int) years",ci=None, palette="muted"
          scatter_kws={"s": 50, "alpha": 1}, data=day5)
```

Out[12]: <seaborn.axisgrid.FacetGrid at 0x18fb9739ca0>



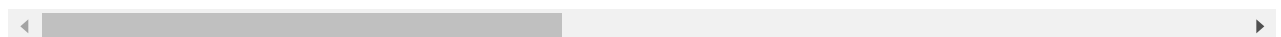


```
In [16]: day5=pd.read_csv("C:/Users/Yasir Mehmood/Downloads/Python Programs/Chilla_data2_for_plo
day5
```

Out[16]:

	Gender	Location	Age	Qualification_completed	field_of_study	Purpose_for_chilla	What are you?	Blog
0	Male	Pakistan	36-40	Masters	Natural Sciences	to boost my skill set	Unemployed	
1	Male	Pakistan	26-30	Bachelors	CS/IT	to boost my skill set	Student	
2	Male	Pakistan	31-35	Masters	Engineering	Switch my field of study	Employed	
3	Female	Pakistan	31-35	Masters	CS/IT	to boost my skill set	Employed	
4	Female	Pakistan	26-30	Masters	Engineering	to boost my skill set	Student	
...	...	...	...	...	...	...	...	...
370	Male	Pakistan	26-30	Masters	Engineering	to boost my skill set	Employed	
371	Male	Pakistan	31-35	Bachelors	Engineering	to boost my skill set	Employed	
372	Male	Pakistan	21-25	Bachelors	CS/IT	to boost my skill set	Employed	
373	Male	Pakistan	26-30	Masters	Engineering	to boost my skill set	Employed	
374	Female	Pakistan	31-35	Masters	Mathematics	Switch my field of study	Unemployed	

375 rows × 23 columns



## 2- Using Scatter Plot code on my own data and show graphically behaviour

```
In [22]: import seaborn as sns
import matplotlib.pyplot as plt
sns.set_theme(style="whitegrid")

# Load the example diamonds dataset
day5=pd.read_csv("C:/Users/Yasir Mehmood/Downloads/Python Programs/Chilla_data2_for_plo

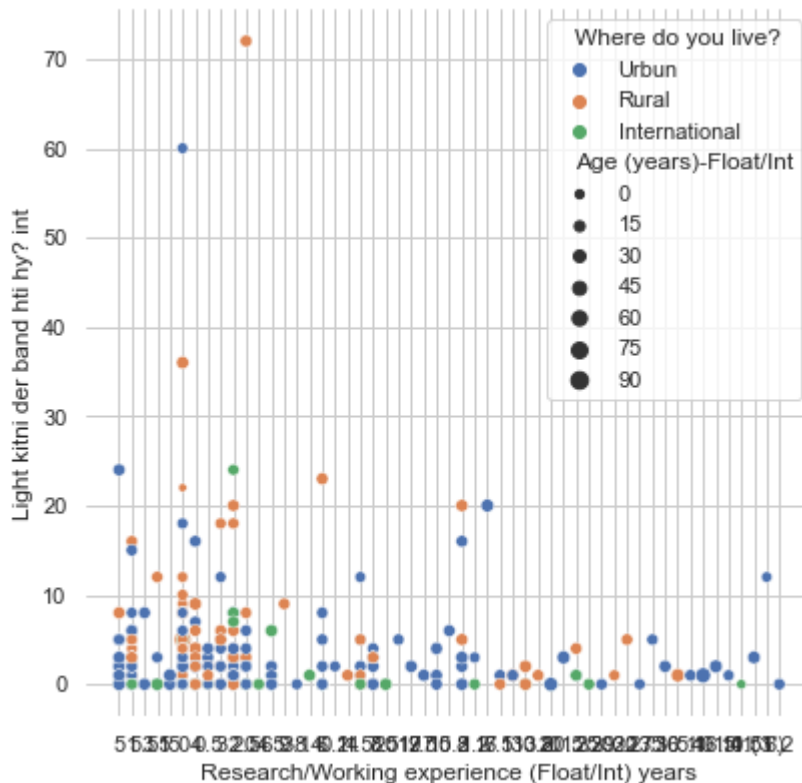
# # Draw a scatter plot while assigning point colors and sizes to different
# # variables in the dataset
f, ax = plt.subplots(figsize=(6.5, 6.5))
sns.despine(f, left=True, bottom=True)
```

```

clarity_ranking = ["Gender", "Location", "What are you?", "Which mobile sim do you use",
                  "Prepaid or Postpaid", "Purpose_for_chilla", "Qualification_complete",
                  "Your favorite programming language?"]
sns.scatterplot(x="Research/Working experience (Float/Int) years", y="Light kitni der b
                hue="Where do you live?", size="Age (years)-Float/Int", data=day5)
#
# palette="ch:r=-.2,d=.3_r",
# hue_order=clarity_ranking,
# sizes=(1, 8), linewidth=0,
# data=diamonds, ax=ax)

```

Out[22]: <AxesSubplot:xlabel='Research/Working experience (Float/Int) years', ylabel='Light kitni der band hti hy? int'>



## Add Palette Element

```

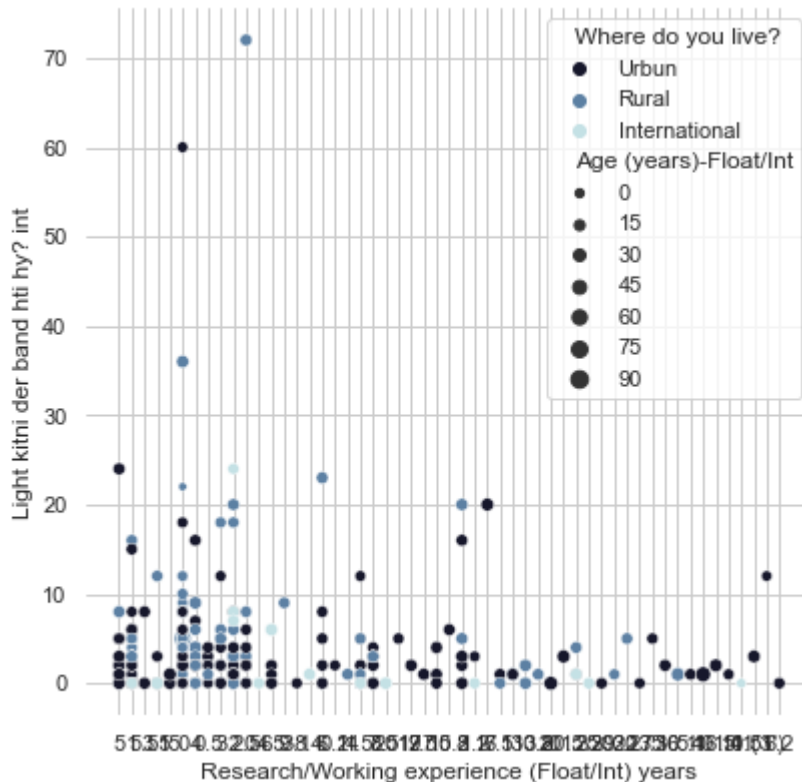
In [26]: import seaborn as sns
import matplotlib.pyplot as plt
sns.set_theme(style="whitegrid")

# Load the example diamonds dataset
day5=pd.read_csv("C:/Users/Yasir Mehmood/Downloads/Python Programs/Chilla_data2_for_plo

# # Draw a scatter plot while assigning point colors and sizes to different
# # variables in the dataset
f, ax = plt.subplots(figsize=(6.5, 6.5))
sns.despine(f, left=True, bottom=True)
clarity_ranking = ["Gender", "Location", "What are you?", "Which mobile sim do you use",
                  "Prepaid or Postpaid", "Purpose_for_chilla", "Qualification_complete",
                  "Your favorite programming language?"]
sns.scatterplot(x="Research/Working experience (Float/Int) years", y="Light kitni der b
                hue="Where do you live?", size="Age (years)-Float/Int", palette="ch:r=-
#
# hue_order=clarity_ranking,
# sizes=(1, 8), linewidth=0,
# data=diamonds, ax=ax)

```

Out[26]: <AxesSubplot:xlabel='Research/Working experience (Float/Int) years', ylabel='Light kitni der band hti hy? int'>



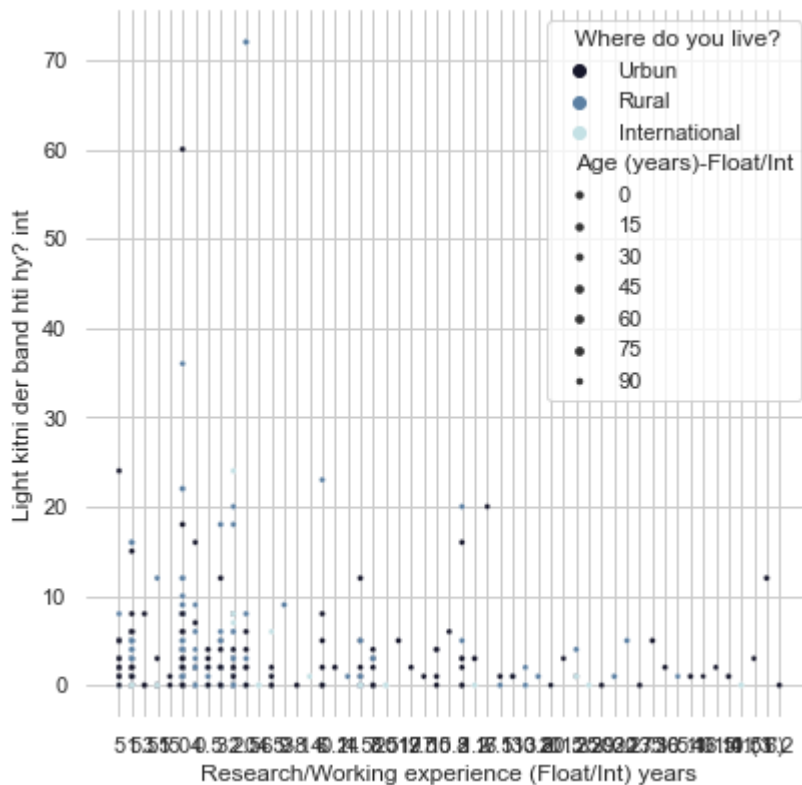
## Add Size Element

```
In [33]: import seaborn as sns
import matplotlib.pyplot as plt
sns.set_theme(style="whitegrid")

# Load the example diamonds dataset
day5=pd.read_csv("C:/Users/Yasir Mehmood/Downloads/Python Programs/Chilla_data2_for_plo

# # Draw a scatter plot while assigning point colors and sizes to different
# # variables in the dataset
f, ax = plt.subplots(figsize=(6.5, 6.5))
sns.despine(f, left=True, bottom=True)
clarity_ranking = ["Gender", "Location", "What are you?", "Which mobile sim do you use"
                  "Prepaid or Postpaid", "Purpose_for_chilla", "Qualification_complete
                  "Your favorite programming language?"]
sns.scatterplot(x="Research/Working experience (Float/Int) years", y="Light kitni der b
               hue="Where do you live?", size="Age (years)-Float/Int", palette="ch:r=-
               sizes=(10, 6), data=day5)
#               linewidth=0,
#               data=diamonds, ax=ax)
```

Out[33]: <AxesSubplot:xlabel='Research/Working experience (Float/Int) years', ylabel='Light kitni der band hti hy? int'>



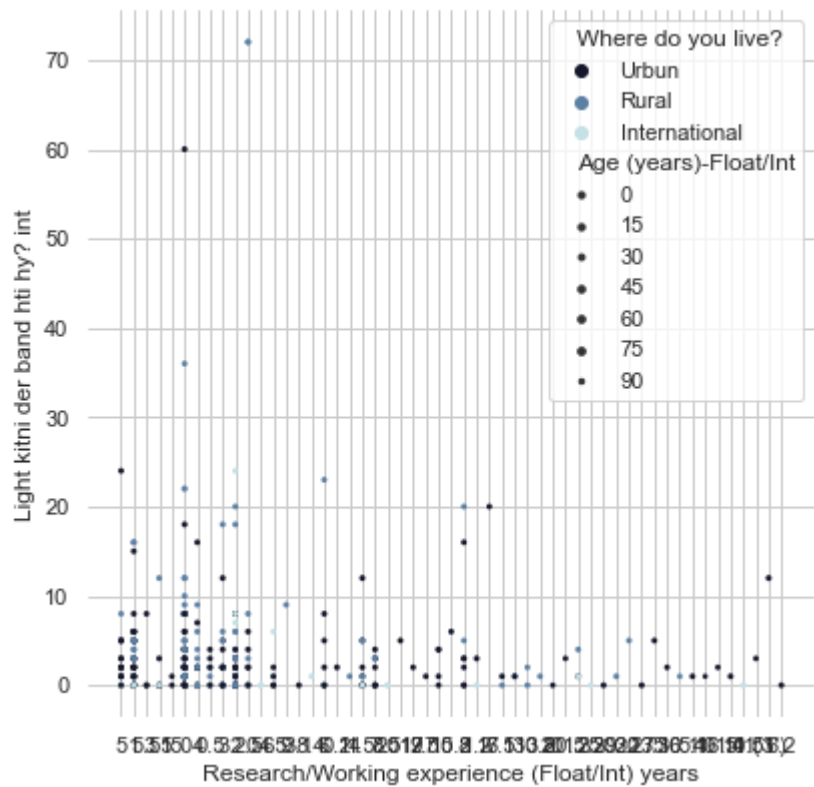
## Add Linewidth Element

```
In [37]: import seaborn as sns
import matplotlib.pyplot as plt
sns.set_theme(style="whitegrid")

# Load the example diamonds dataset
day5=pd.read_csv("C:/Users/Yasir Mehmood/Downloads/Python Programs/Chilla_data2_for_plo

# # Draw a scatter plot while assigning point colors and sizes to different
# # variables in the dataset
f, ax = plt.subplots(figsize=(6.5, 6.5))
sns.despine(f, left=True, bottom=True)
clarity_ranking = ["Gender", "Location", "What are you?", "Which mobile sim do you use"
                  "Prepaid or Postpaid", "Purpose_for_chilla", "Qualification_complete
                  "Your favorite programming language?"]
sns.scatterplot(x="Research/Working experience (Float/Int) years", y="Light kitni der b
                hue="Where do you live?", size="Age (years)-Float/Int", palette="ch:r=-
                sizes=(10, 6), linewidth=0, ax=ax, data=day5)
```

```
Out[37]: <AxesSubplot:xlabel='Research/Working experience (Float/Int) years', ylabel='Light kitni
der band hti hy? int'>
```



3- Line Plot code Implement modify in my code

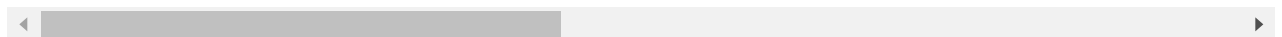
```
In [38]: import seaborn as sns
sns.set_theme(style="darkgrid")
# Load an example dataset with Long-form data
day5=pd.read_csv("C:/Users/Yasir Mehmood/Downloads/Python Programs/Chilla_data2_for_plo
day5
```

Out[38]:

	Gender	Location	Age	Qualification_completed	field_of_study	Purpose_for_chilla	What are you?	Blc grc
0	Male	Pakistan	36-40	Masters	Natural Sciences	to boost my skill set	Unemployed	
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	Female	Pakistan	31-35	Masters	CS/IT	to boost my skill set	Employed	
4	Female	Pakistan	26-30	Masters	Enginnering	to boost my skill set	Student	

	Gender	Location	Age	Qualification_completed	field_of_study	Purpose_for_chilla	What are you?	Blc grc
...	...	...	...	...	...	...	...	...
370	Male	Pakistan	26-30	Masters	Enginnering	to boost my skill set	Employed	
371	Male	Pakistan	31-35	Bachelors	Enginnering	to boost my skill set	Employed	
372	Male	Pakistan	21-25	Bachelors	CS/IT	to boost my skill set	Employed	
373	Male	Pakistan	26-30	Masters	Enginnering	to boost my skill set	Employed	
374	Female	Pakistan	31-35	Masters	Mathematics	Switch my field of study	Unemployed	

375 rows × 23 columns



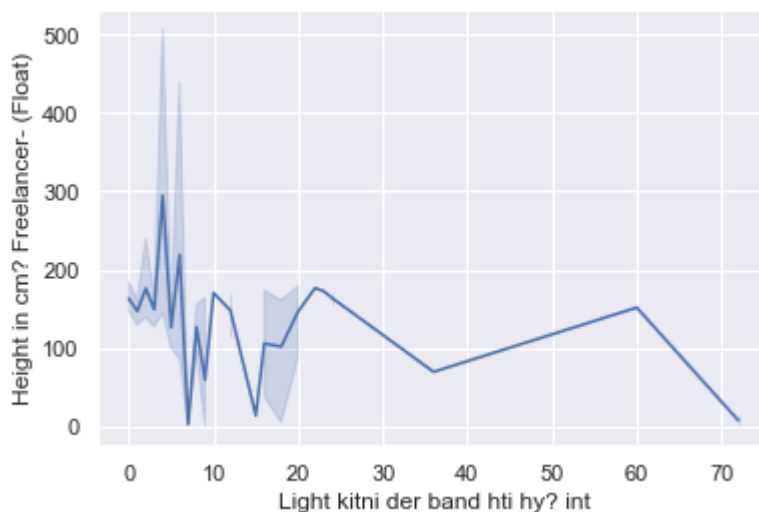
In [40]:

```
import seaborn as sns
sns.set_theme(style="darkgrid")
# Load an example dataset with long-form data
day5=pd.read_csv("C:/Users/Yasir Mehmood/Downloads/Python Programs/Chilla_data2_for_plo

# # Plot the responses for different events and regions
sns.lineplot(x="Light kitni der band hti hy? int", y="Height in cm? Freelancer- (Float)
#             hue="region", style="event"
```

Out[40]:

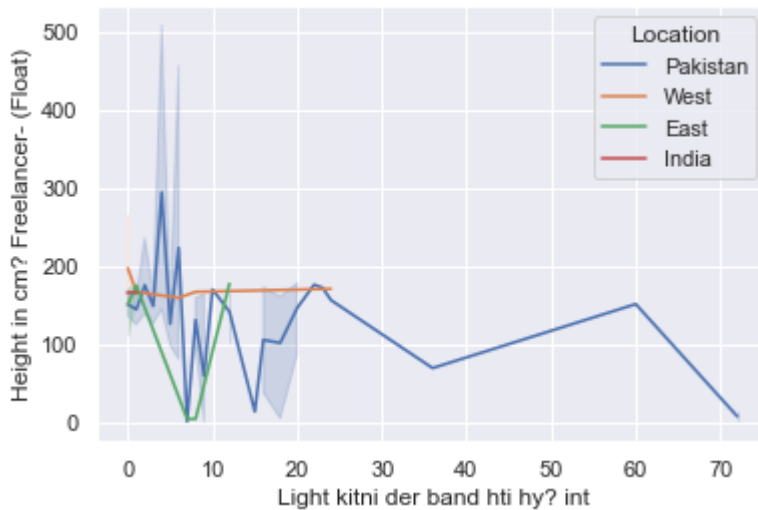
<AxesSubplot:xlabel='Light kitni der band hti hy? int', ylabel='Height in cm? Freelancer- (Float)'\>



```
In [42]: import seaborn as sns
sns.set_theme(style="darkgrid")
# Load an example dataset with long-form data
day5=pd.read_csv("C:/Users/Yasir Mehmood/Downloads/Python Programs/Chilla_data2_for_plo

# # Plot the responses for different events and regions
sns.lineplot(x="Light kitni der band hti hy? int", y="Height in cm? Freelancer- (Float)
#           , style="event"
```

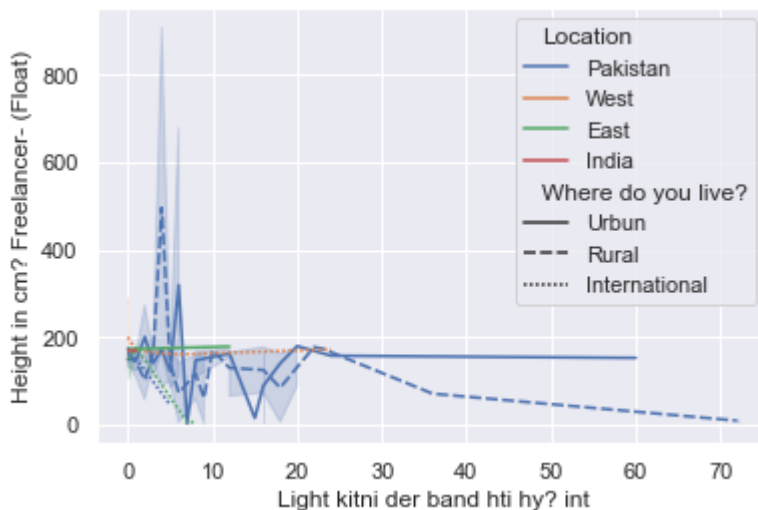
```
Out[42]: <AxesSubplot:xlabel='Light kitni der band hti hy? int', ylabel='Height in cm? Freelancer-
- (Float)'\>
```



```
In [52]: import seaborn as sns
sns.set_theme(style="darkgrid")
# Load an example dataset with long-form data
day5=pd.read_csv("C:/Users/Yasir Mehmood/Downloads/Python Programs/Chilla_data2_for_plo

# # Plot the responses for different events and regions
sns.lineplot(x="Light kitni der band hti hy? int", y="Height in cm? Freelancer- (Float)
            style="Where do you live?", sizes=(8,6), data=day5)
```

```
Out[52]: <AxesSubplot:xlabel='Light kitni der band hti hy? int', ylabel='Height in cm? Freelancer
- (Float)'\>
```



## 4- DisPlot code Implement to modify my code



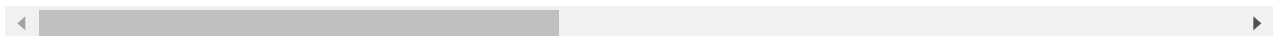
```
In [53]: import seaborn as sns

sns.set_theme(style="darkgrid")
day5=pd.read_csv("C:/Users/Yasir Mehmood/Downloads/Python Programs/Chilla_data2_for_plo
day5
```

Out[53]:

	Gender	Location	Age	Qualification_completed	field_of_study	Purpose_for_chilla	What are you?	Blc grc
0	Male	Pakistan	36-40	Masters	Natural Sciences	to boost my skill set	Unemployed	
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	Female	Pakistan	31-35	Masters	CS/IT	to boost my skill set	Employed	
4	Female	Pakistan	26-30	Masters	Enginnering	to boost my skill set	Student	
...	...	...	...	...	...	...	...	...
370	Male	Pakistan	26-30	Masters	Enginnering	to boost my skill set	Employed	
371	Male	Pakistan	31-35	Bachelors	Enginnering	to boost my skill set	Employed	
372	Male	Pakistan	21-25	Bachelors	CS/IT	to boost my skill set	Employed	
373	Male	Pakistan	26-30	Masters	Enginnering	to boost my skill set	Employed	
374	Female	Pakistan	31-35	Masters	Mathematics	Switch my field of study	Unemployed	

375 rows × 23 columns

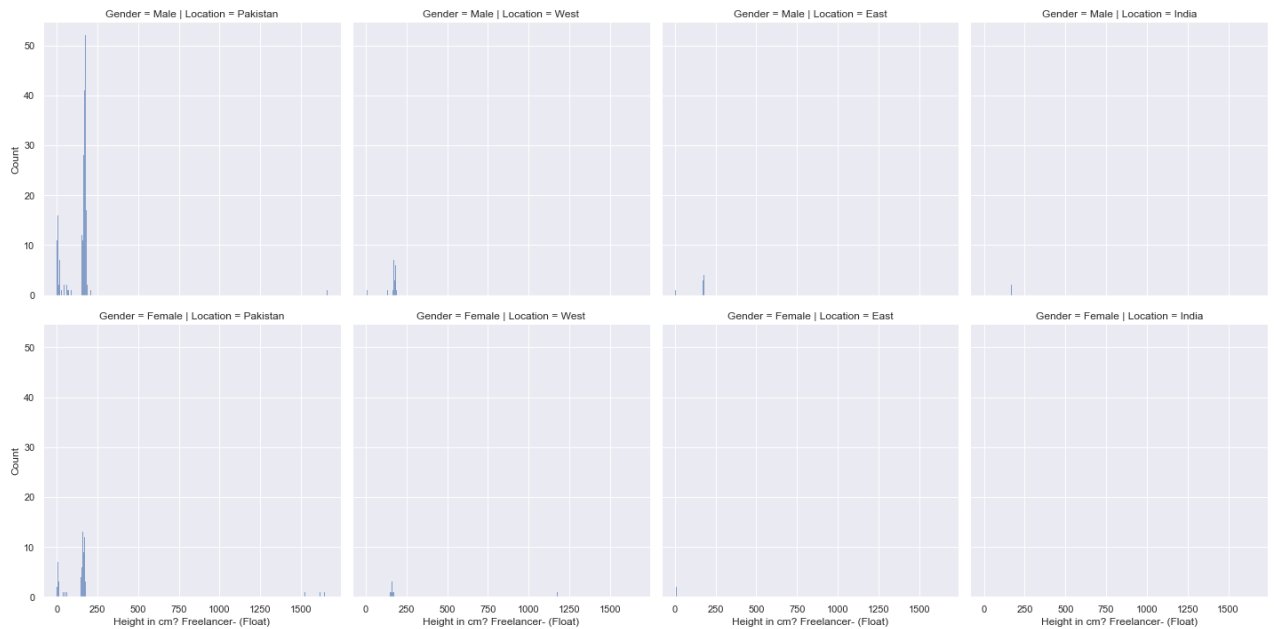


```
In [54]: import seaborn as sns

sns.set_theme(style="darkgrid")
day5=pd.read_csv("C:/Users/Yasir Mehmood/Downloads/Python Programs/Chilla_data2_for_plo
sns.displot(x="Height in cm? Freelancer- (Float)", col="Location", row="Gender", data=d
# binwidth=3, height=3, facet_kws=dict(margin_titles=True),
# )
```

<seaborn.axisgrid.FacetGrid at 0x18fc79f7d60>

Out[54]:



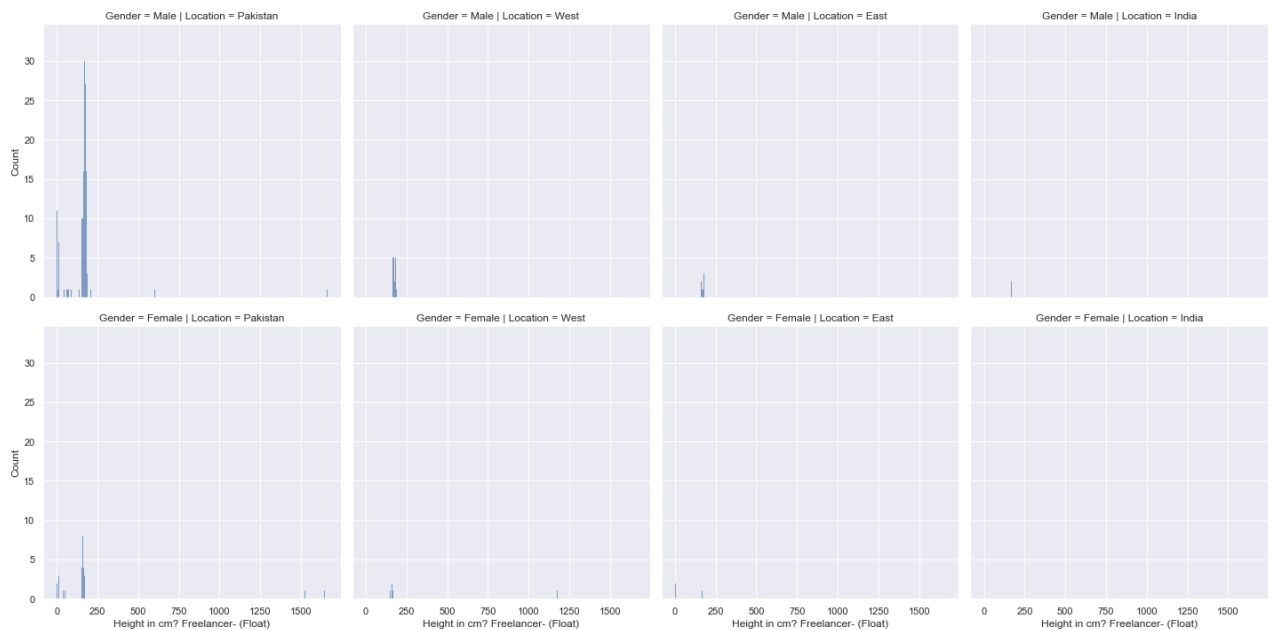
In [55]:

```
import seaborn as sns

sns.set_theme(style="darkgrid")
day5=pd.read_csv("C:/Users/Yasir Mehmood/Downloads/Python Programs/Chilla_data2_for_plo
sns.displot(x="Height in cm? Freelancer- (Float)", col="Location", row="Gender", binwid
# height=3, facet_kws=dict(margin_titles=True),
# )
```

Out[55]:

<seaborn.axisgrid.FacetGrid at 0x18fc7e017c0>



## Add Binwidth and Height Element

In [56]:

```
import seaborn as sns

sns.set_theme(style="darkgrid")
day5=pd.read_csv("C:/Users/Yasir Mehmood/Downloads/Python Programs/Chilla_data2_for_plo
```

```
sns.displot(x="Height in cm? Freelancer- (Float)", col="Location", row="Gender", binwid
            height=3, data=day5)
#         facet_kws=dict(margin_titles=True),
# )
```

Out[56]: <seaborn.axisgrid.FacetGrid at 0x18fc79dc880>



In [57]: `import seaborn as sns`

```
sns.set_theme(style="darkgrid")
day5=pd.read_csv("C:/Users/Yasir Mehmood/Downloads/Python Programs/Chilla_data2_for_plo
sns.displot(x="Height in cm? Freelancer- (Float)", col="Location", row="Gender", binwid
            height=3, facet_kws=dict(margin_titles=True), data=day5)
```

Out[57]: <seaborn.axisgrid.FacetGrid at 0x18fc7d5a370>

