

Scatter plot in Matplotlib****

add Codeadd Markdown

[2]:



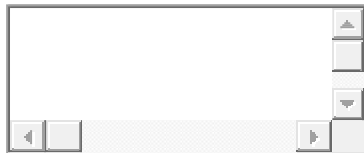
```
import matplotlib.pyplot as plt
import numpy as np
import pandas as pd
```

add Codeadd Markdown

Defining the data****

add Codeadd Markdown

[3]:



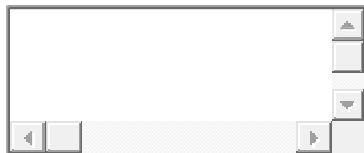
```
rollno = [1,2,3,4,5,6,7,8,9,10]
marks = [10,20,30,40,50,60,70,80,90,100]
```

add Codeadd Markdown

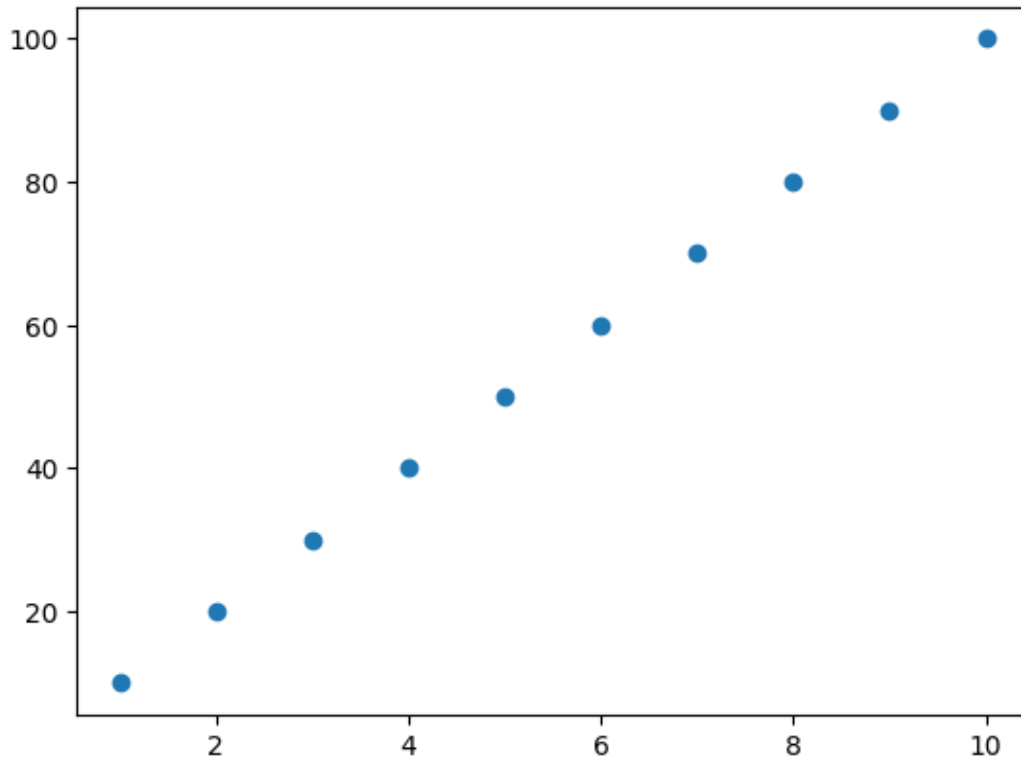
Implementing the Scatter plot****

add Codeadd Markdown

[4]:



```
plt.scatter(rollno, marks)
plt.show()
```



add Codeadd Markdown

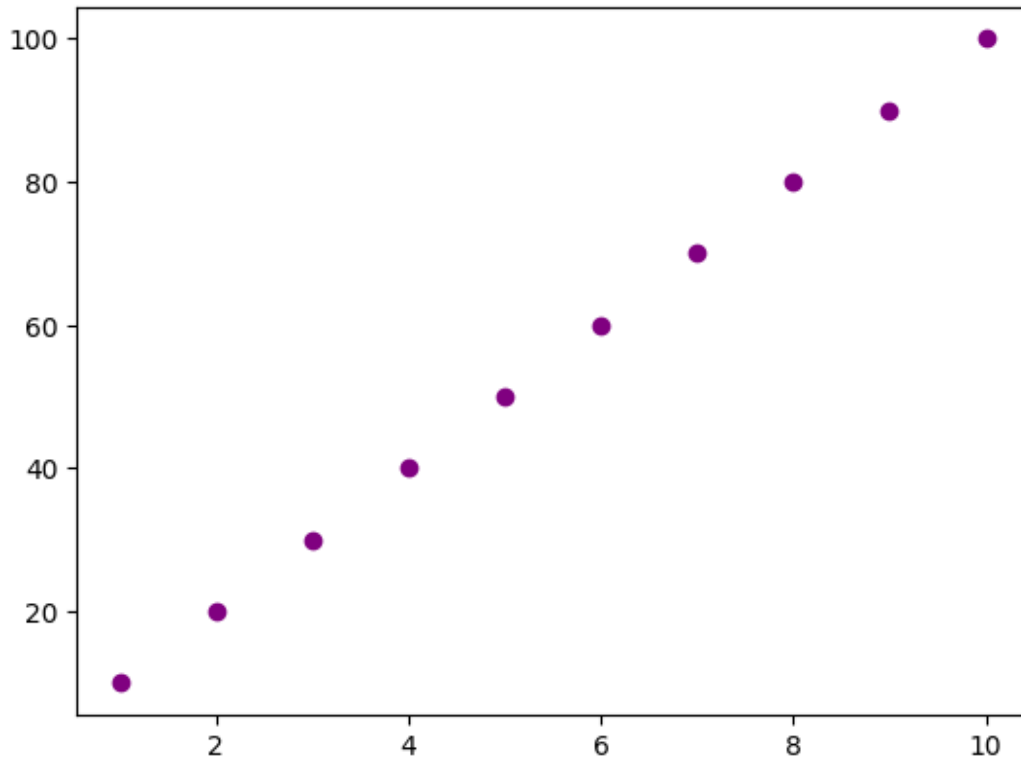
Changing color of the Plotted points****

add Codeadd Markdown



```
plt.scatter(rollno, marks, color = 'purple')  
plt.show()
```

[12]:



add Codeadd Markdown

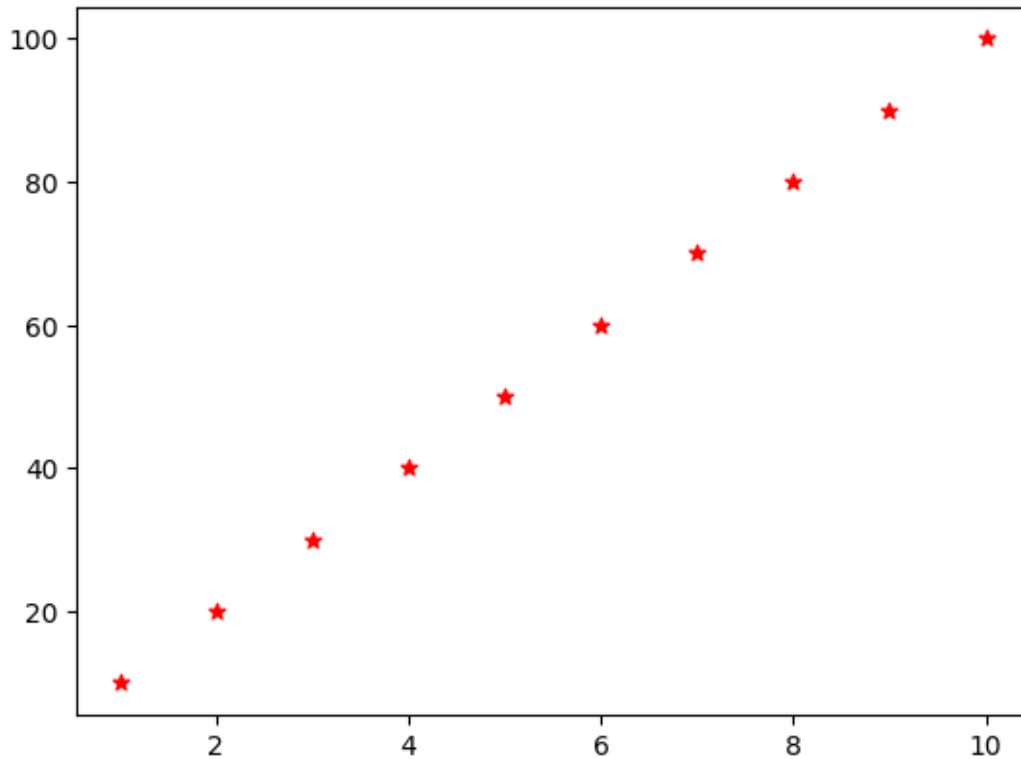
Changing Marker of the PLOTter Points****

add Codeadd Markdown

[22]:



```
plt.scatter(rollno, marks, color = 'red', marker = '*')  
plt.show()
```



add Codeadd Markdown

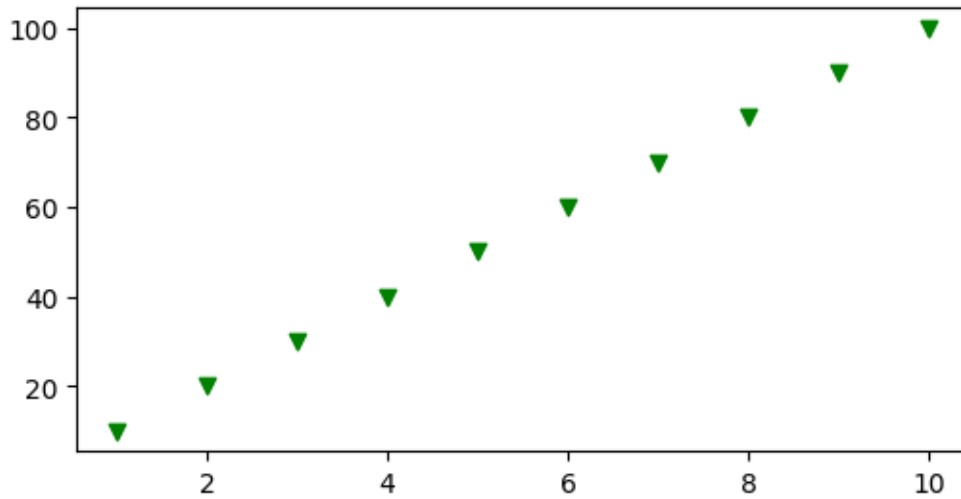
Defining plot figure() function****

add Codeadd Markdown



```
plt.figure(figsize = (6,3))  
plt.scatter(rollno, marks, color = 'green', marker = 'v')  
plt.show()
```

[33]:

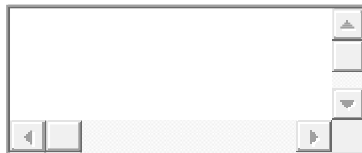


add Codeadd Markdown

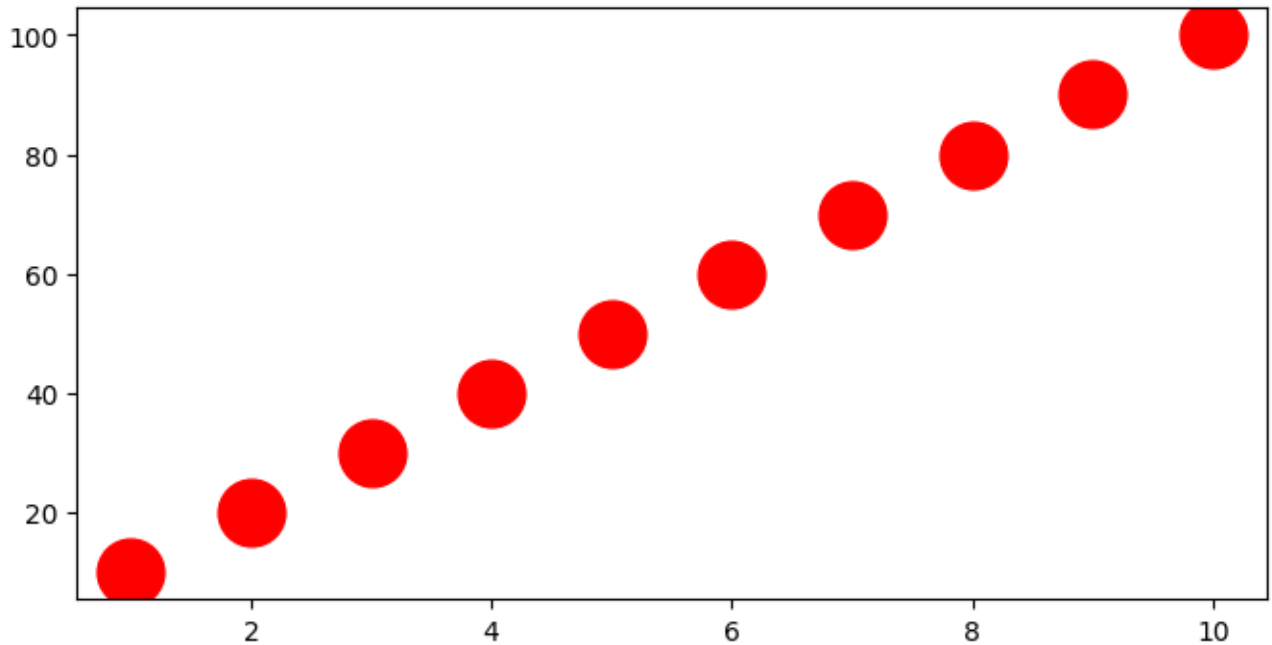
More functions unsing plot function****

add Codeadd Markdown

[51]:



```
plt.figure(figsize = (8,4))  
plt.plot(rollno, marks, 'ro', markersize = 25)  
plt.show()
```



add Codeadd Markdown

Multiple plots on Same Figure****

add Codeadd Markdown

[53]:



```
temp_pune = [2,4,6,12,34,8,29,36,18,9,40,56]
```

```
humid_pune = [59,56,53,51,50,45,48,42,39,36,34,24]
```

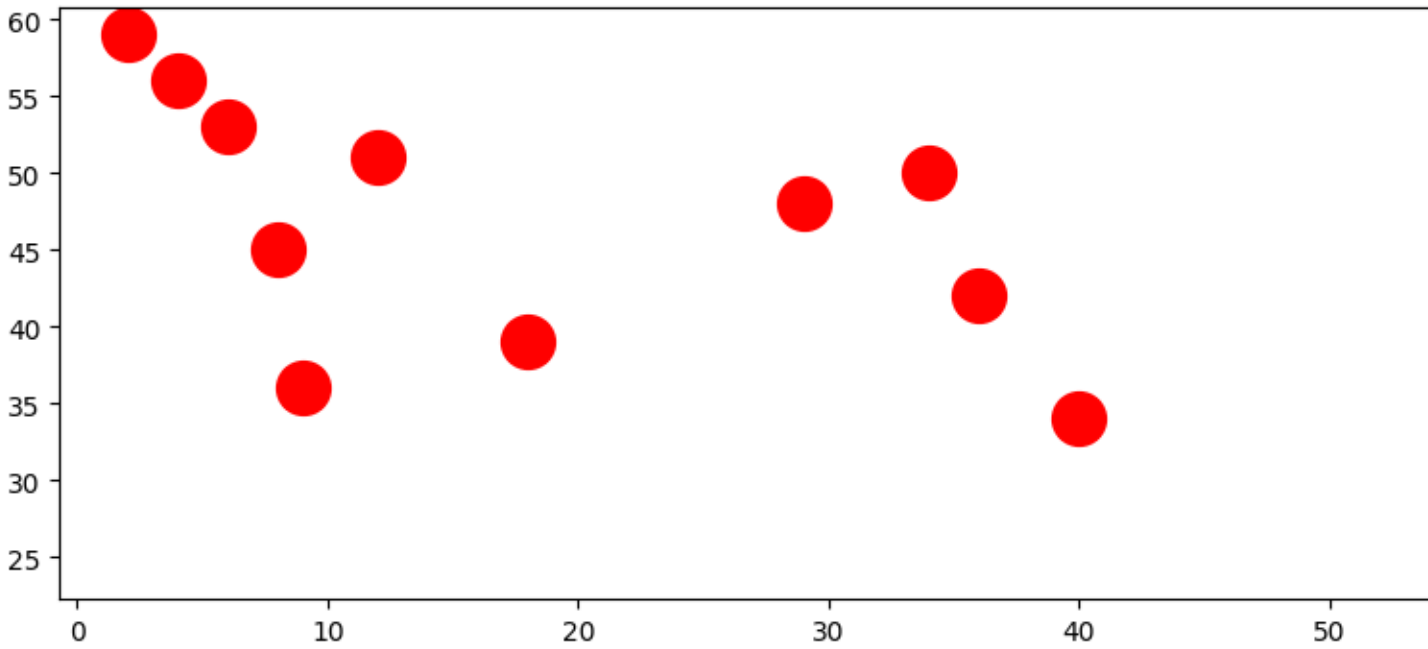
```
temp_bangalore = [20,23,24,26,28,30,38,33,35,22,21,27]
```

```
humid_bangalore = [45,43,32,42,41,40,36,37,31,44,40,34]
```

```
plt.figure(figsize = (10,4))
```

```
plt.plot(temp_pune, humid_pune, 'ro', markersize = '20')
```

```
plt.show()
```

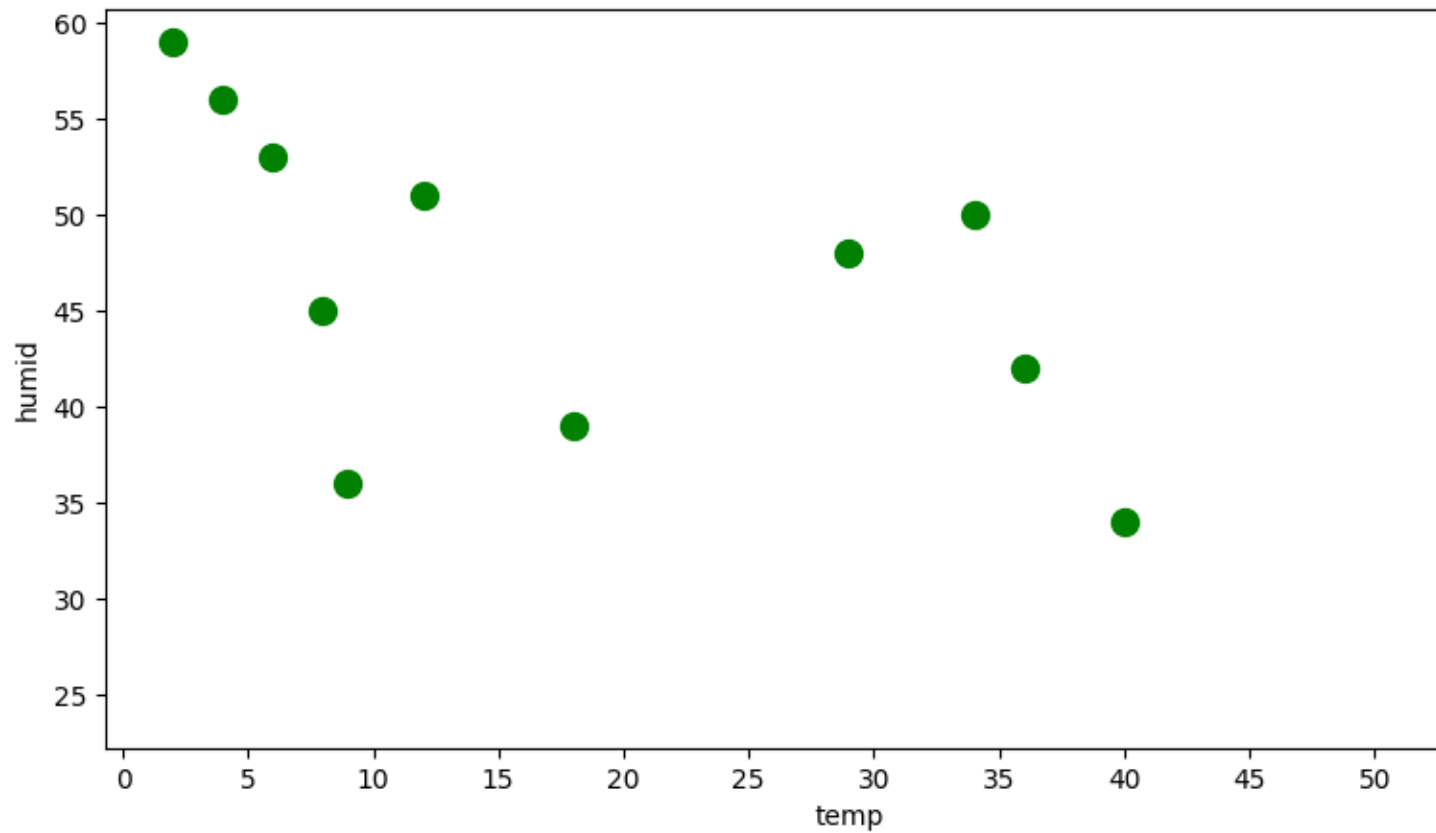


add Codeadd Markdown

[69]:

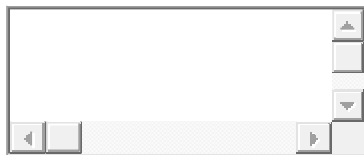


```
plt.figure(figsize = (10,5))
plt.xticks(np.arange(0,70,5))
plt.yticks(np.arange(10,70,5))
plt.plot(temp_pune, humid_pune, 'go', markersize = '10')
plt.xlabel('temp')
plt.ylabel('humid')
plt.show()
```

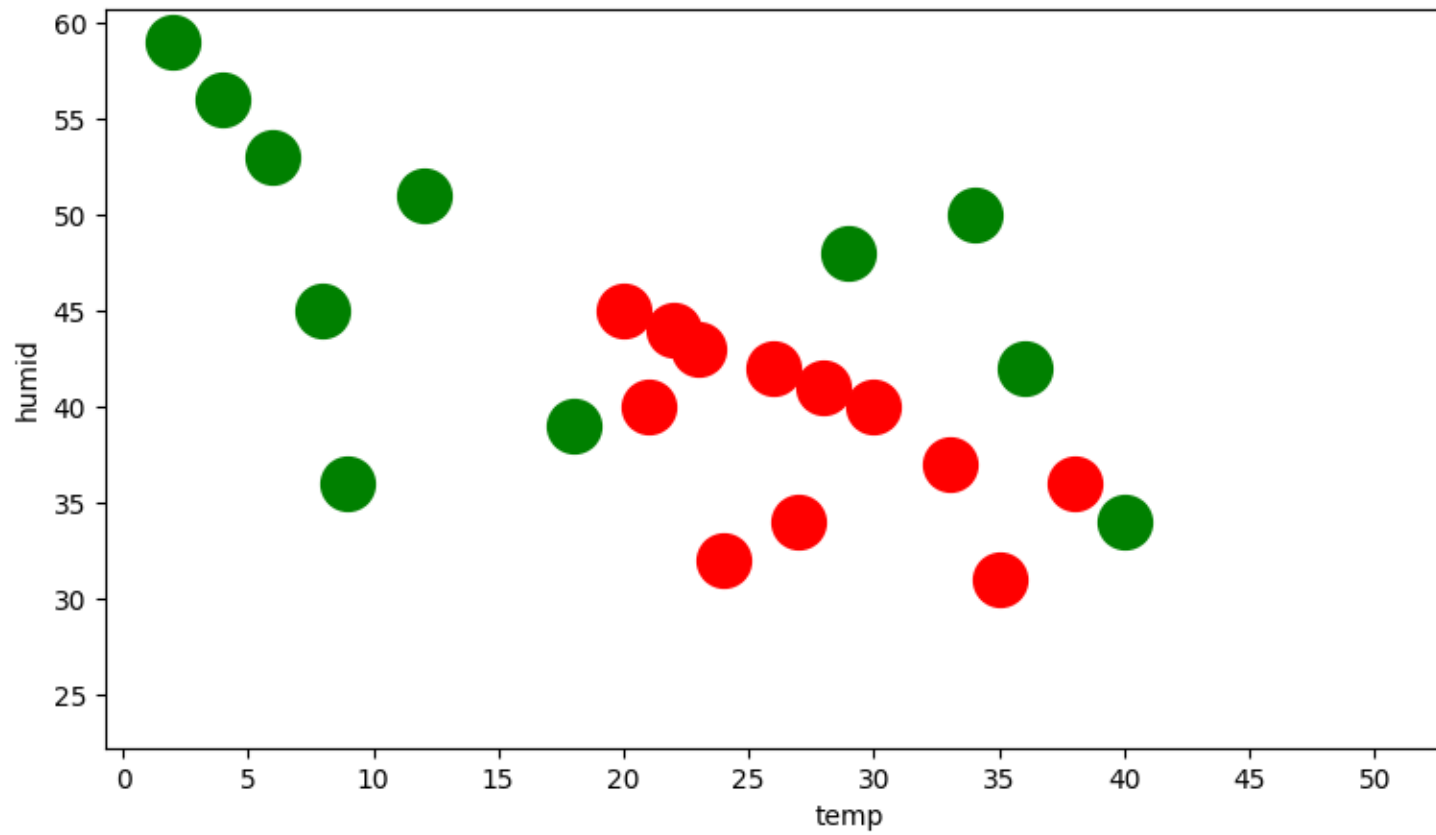


add Codeadd Markdown

[71]:

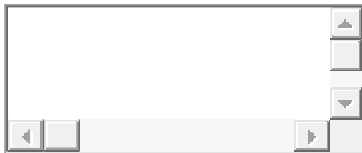


```
plt.figure(figsize = (10,5))
plt.xticks(np.arange(0,70,5))
plt.yticks(np.arange(10,70,5))
plt.plot(temp_pune, humid_pune, 'go', markersize = '20')
plt.plot(temp_bangalore, humid_bangalore, 'ro', markersize = '20')
plt.xlabel('temp')
plt.ylabel('humid')
plt.show()
```

add Codeadd Markdown

[73]:



```
df=pd.read_csv('/kaggle/input/iris-flowers/iris.csv')
df.head()
```

[73]:

	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

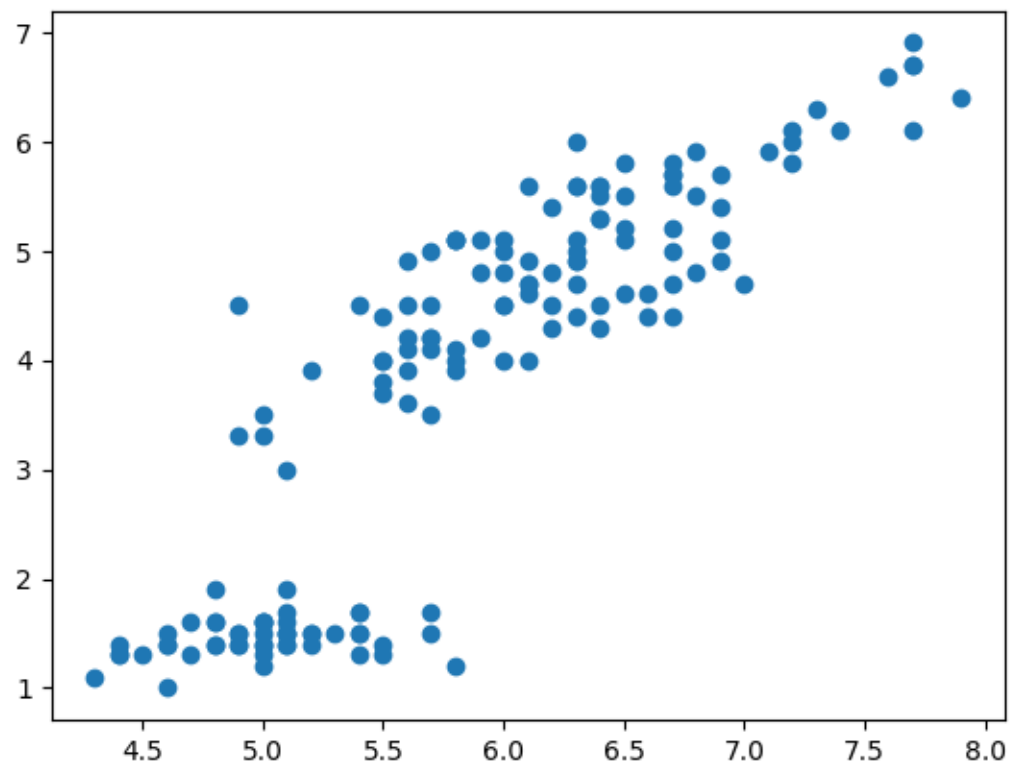
	sepal_length	sepal_width	petal_length	petal_width	species
4	5.0	3.6	1.4	0.2	setosa

add Codeadd Markdown

[78]:

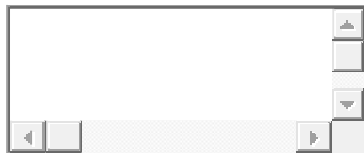


```
plt.scatter(df['sepal_length'], df['petal_length'])
plt.show()
```

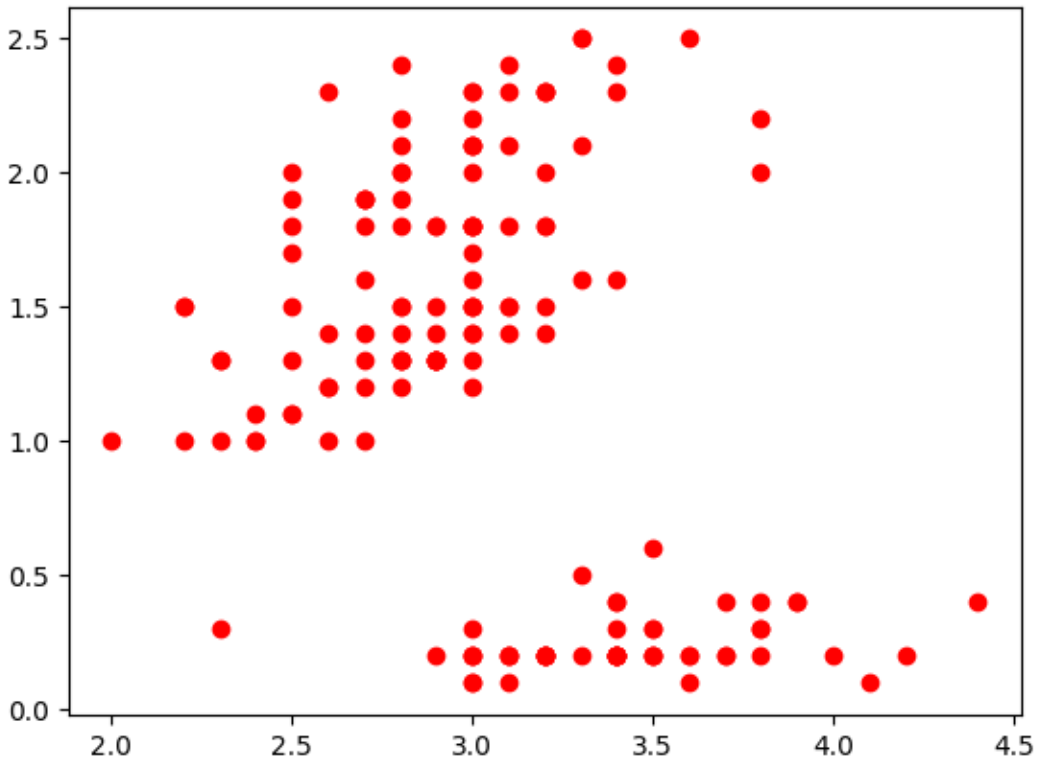


add Codeadd Markdown

[76]:



```
plt.plot(df['sepal_width'], df['petal_width'], 'ro')
plt.show()
```



add Codeadd Markdown

Introducing Alpha(Transparency) 0-Transparent, 1-opaque****

add Codeadd Markdown

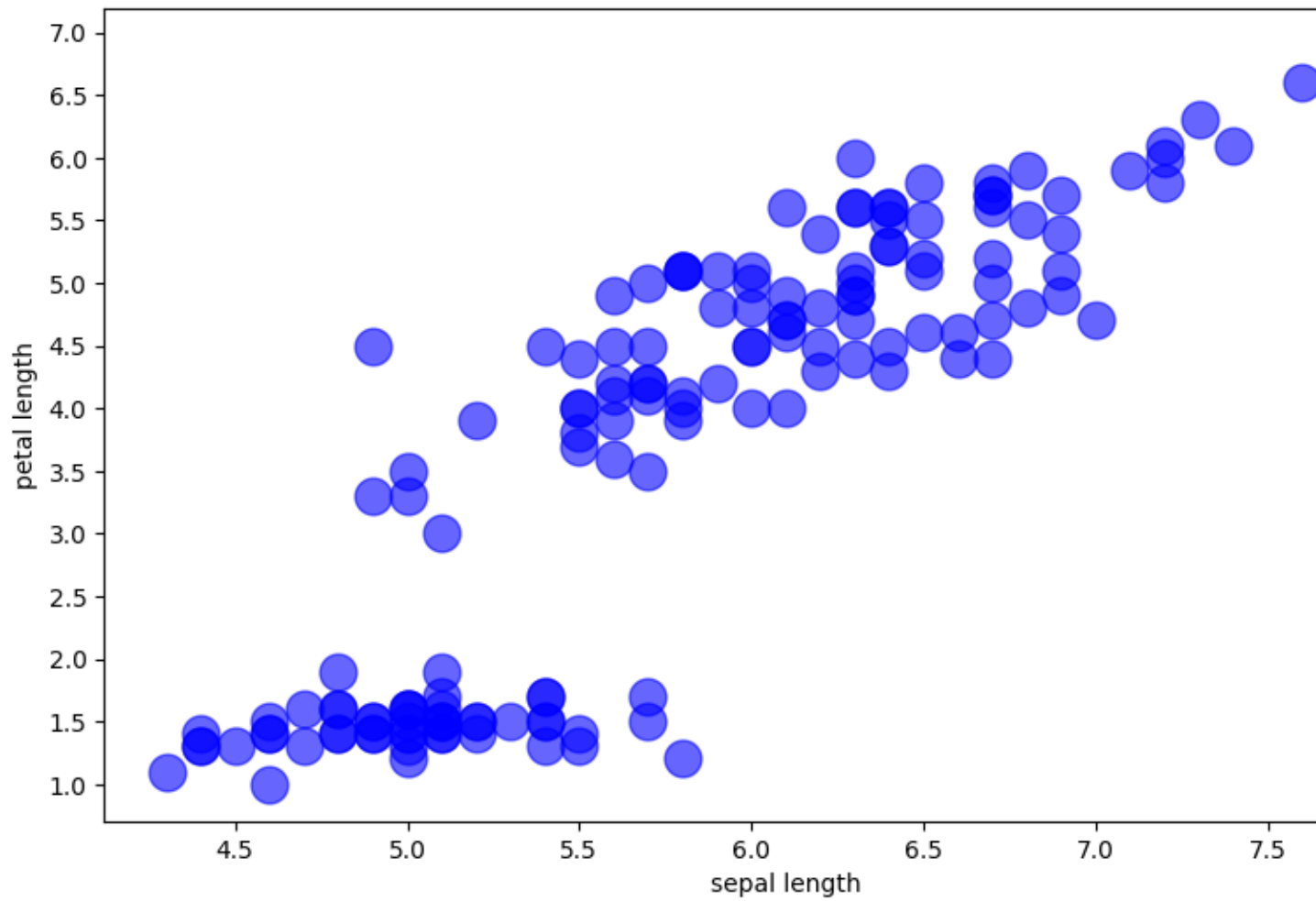
[84]:



```
plt.figure(figsize = (10,6))
plt.xticks(np.arange(1,10,0.5))
plt.yticks(np.arange(1,10,0.5))

plt.plot(df['sepal_length'], df['petal_length'], 'bo', alpha = 0.6, markersize = 15)

plt.xlabel('sepal length')
plt.ylabel('petal length')
plt.show()
```



add Codeadd Markdown

Line plot in Matplotlib****

add Codeadd Markdown



```
import matplotlib.pyplot as plt
import numpy as np
import pandas as pd
```

add Codeadd Markdown

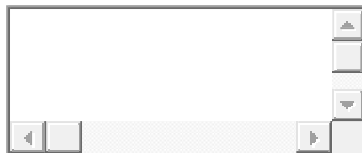
[85]:

[86]:

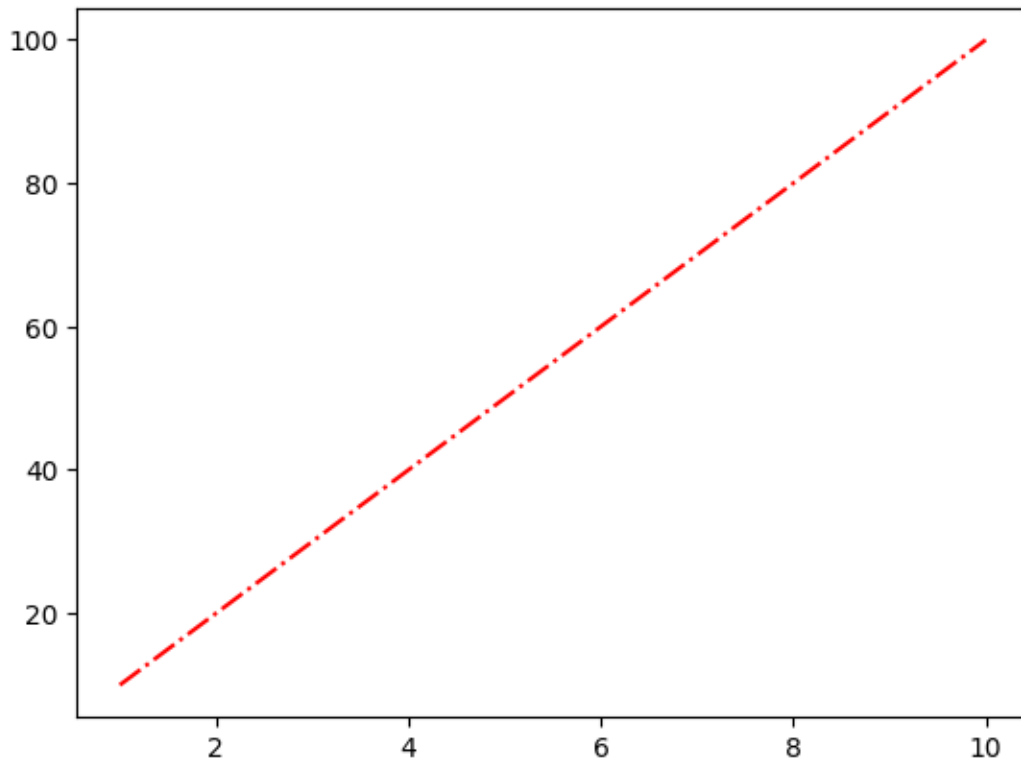


```
rollno = [1,2,3,4,5,6,7,8,9,10]
marks = [10,20,30,40,50,60,70,80,90,100]
add Codeadd Markdown
Different Line styles**
```

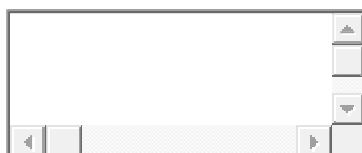
add Codeadd Markdown



```
plt.plot(rollno, marks, 'r-.')
plt.show()
```



add Codeadd Markdown



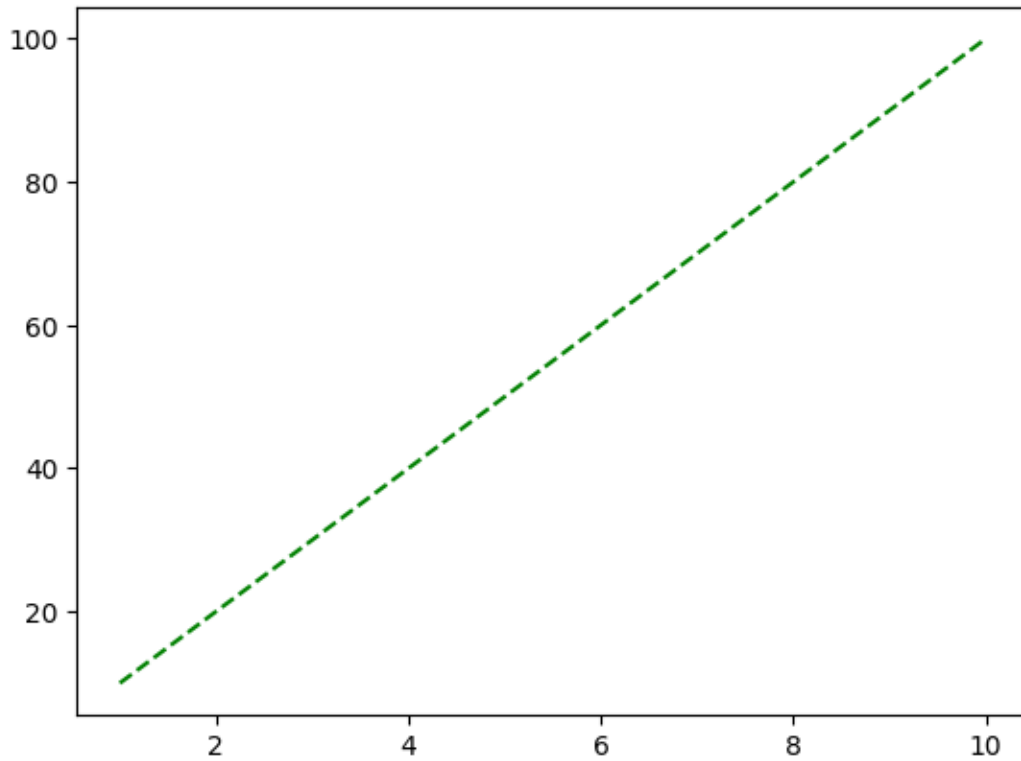
```
plt.plot(rollno, marks, linestyle='--', color= 'green')
```

[<matplotlib.lines.Line2D at 0x7c7d73a4a6e0>]

[89]:

[91]:

[91]:



add Codeadd Markdown

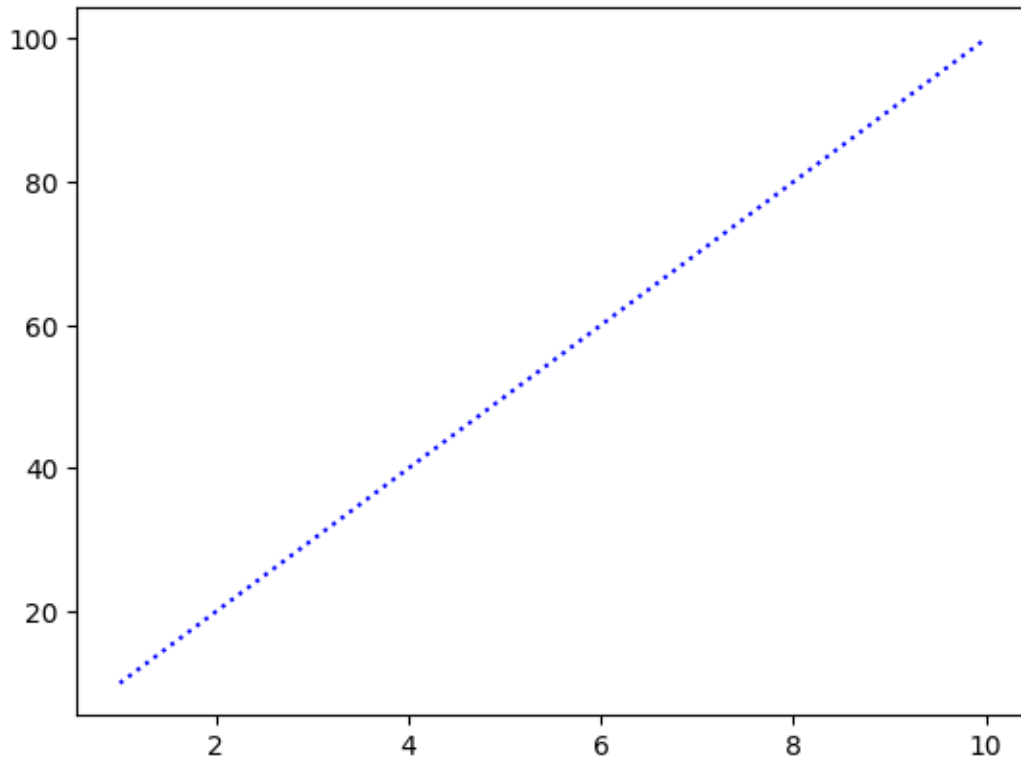


```
plt.plot(rollno, marks, linestyle=':', color= 'blue')
```

```
[<matplotlib.lines.Line2D at 0x7c7d73b8d870>]
```

[92]:

[92]:



add Codeadd Markdown

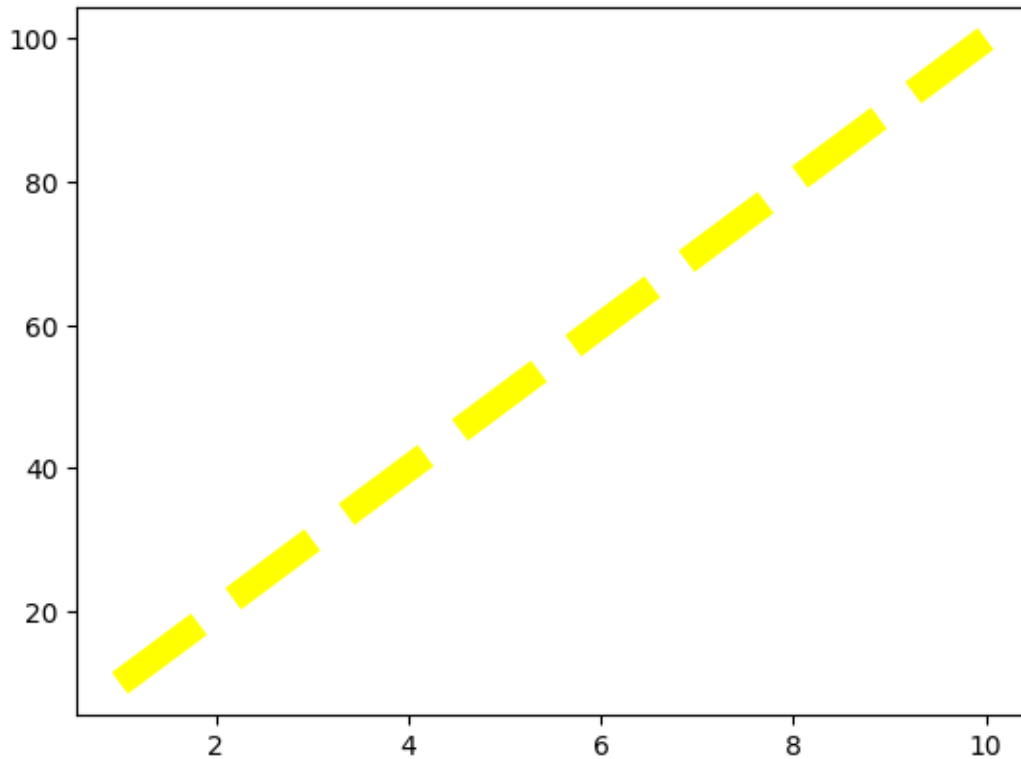


```
plt.plot(rollno, marks, linestyle='--', color= 'yellow', linewidth = 10)
```

```
[<matplotlib.lines.Line2D at 0x7c7d75300670>]
```

[94]:

[94]:



add Codeadd Markdown

> Multiple plots on same figure

add Codeadd Markdown

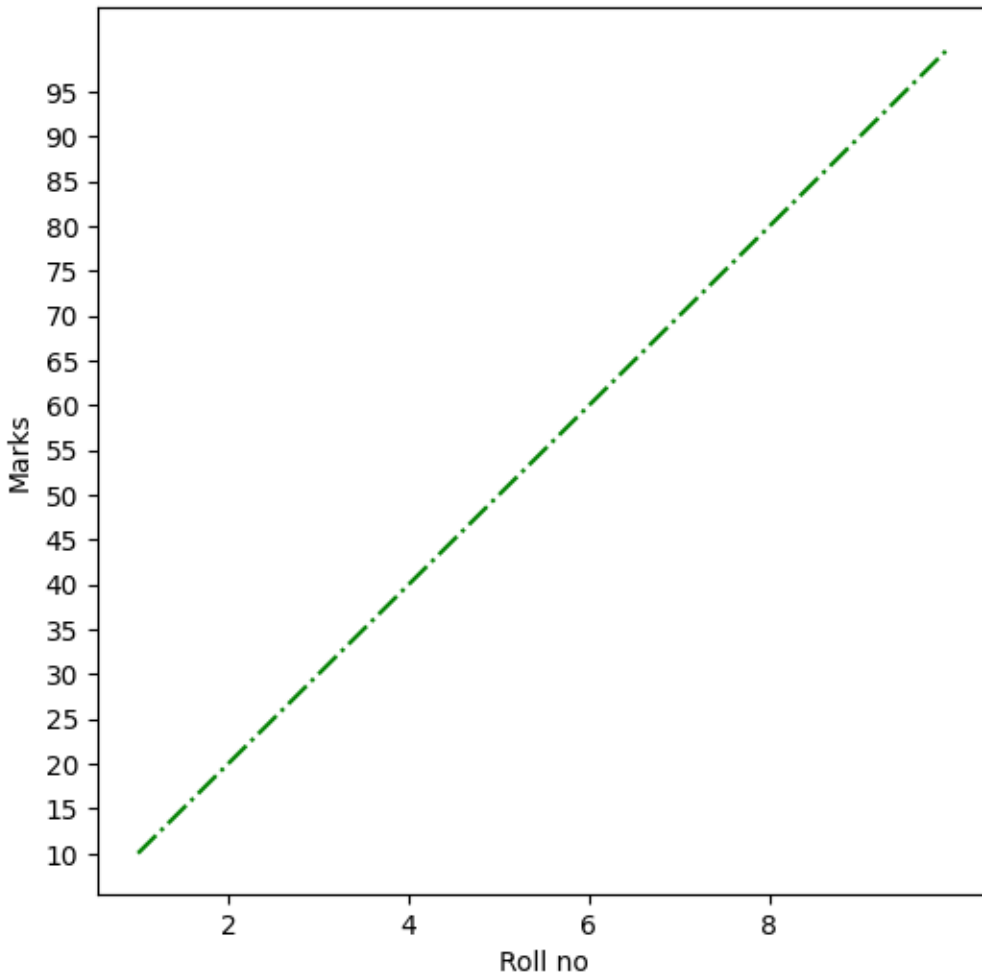


```
plt.figure(figsize = (6,6))  
plt.xticks(np.arange(0,10,2))  
plt.yticks(np.arange(10,100,5))
```

```
plt.plot(rollno,marks, 'g-')
```

```
plt.xlabel('Roll no')  
plt.ylabel('Marks')  
plt.show()
```

[96]:



add Codeadd Markdown

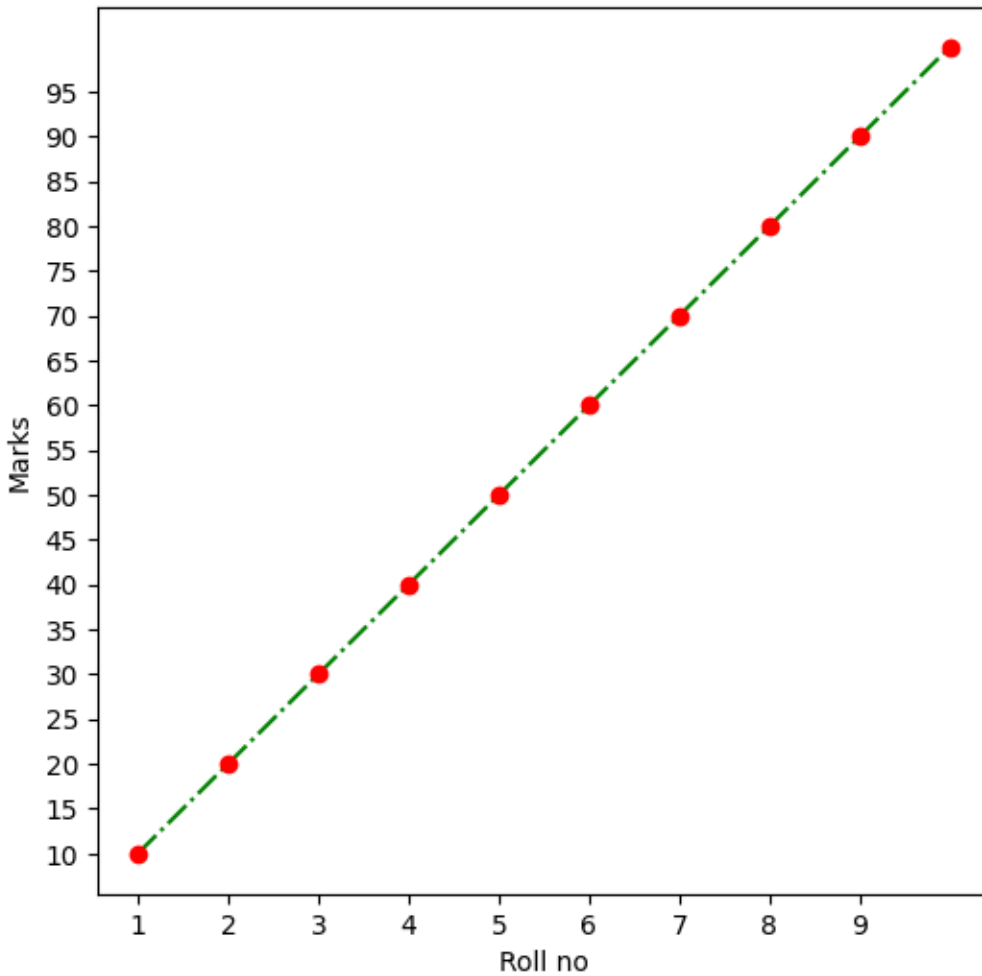
[98]:



```
plt.figure(figsize = (6,6))  
plt.xticks(np.arange(0,10,1))  
plt.yticks(np.arange(10,100,5))
```

```
plt.plot(rollno,marks, 'g-.')  
plt.plot(rollno,marks, 'ro')
```

```
plt.xlabel('Roll no')  
plt.ylabel('Marks')  
plt.show()
```



add Codeadd Markdown

Bar plot in Matplotlib****

add Codeadd Markdown

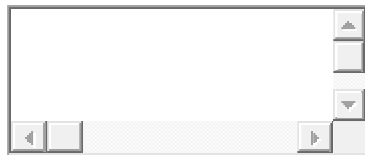


```
import matplotlib.pyplot as plt
import numpy as np
import pandas as pd
```

add Codeadd Markdown

[99]:

[152]:



```
plt.style.use('dark_background')  
add Codeadd Markdown
```

[100]:

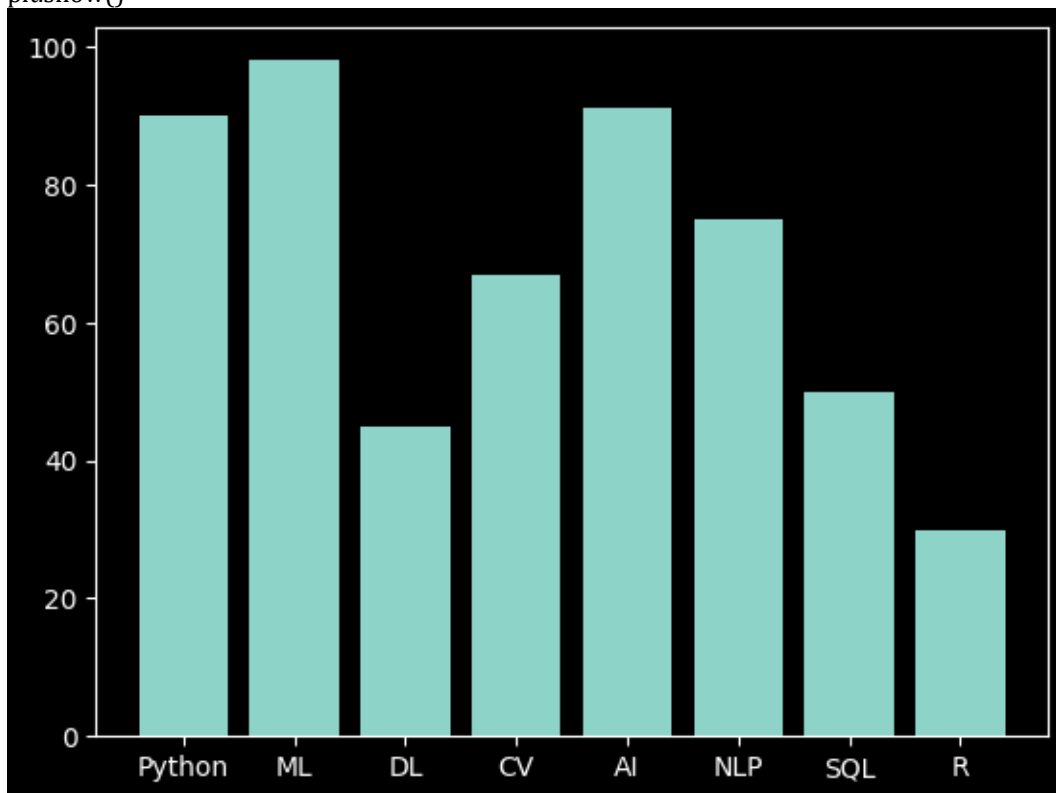


```
subjects = ['Python', 'ML', 'DL', 'CV', 'AI', 'NLP', 'SQL', 'R']  
rank = [90, 98, 45, 67, 91, 75, 50, 30]  
add Codeadd Markdown
```

[124]:

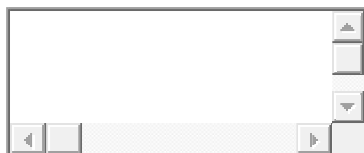


```
plt.bar(subjects, rank)  
plt.show()
```

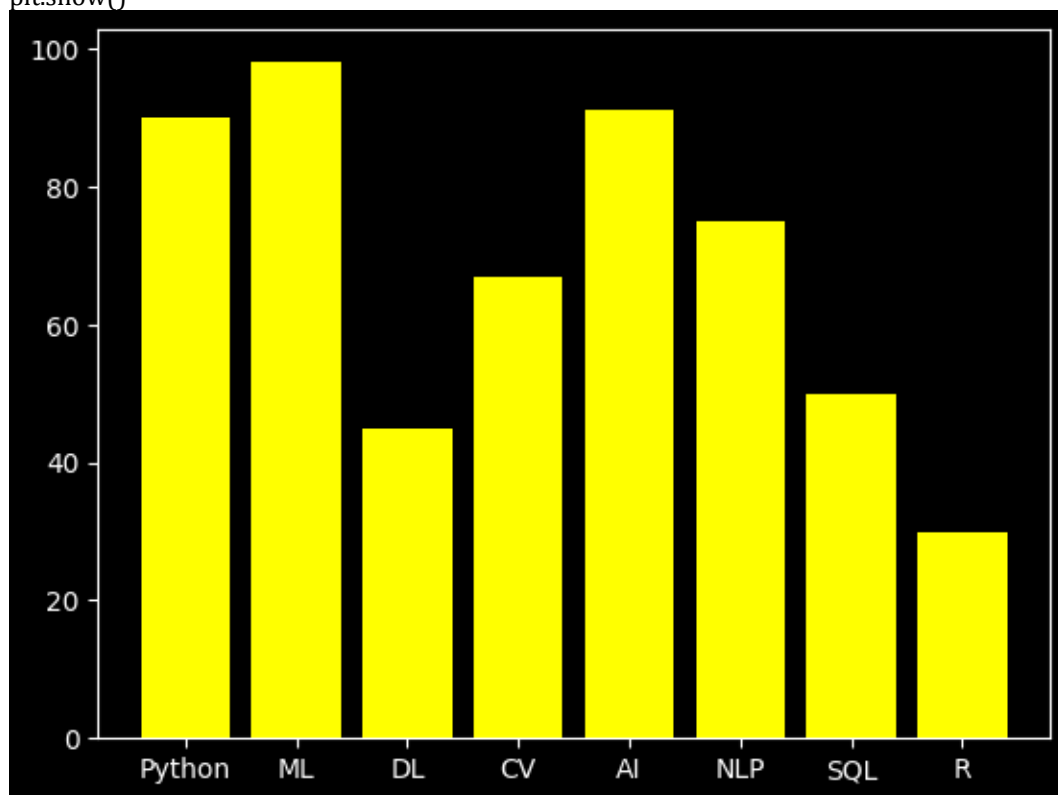


add Codeadd Markdown

[125]:

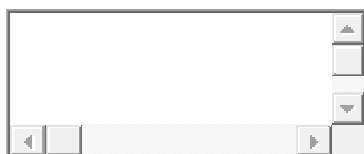


```
plt.bar(subjects, rank, color = 'yellow')  
plt.show()
```

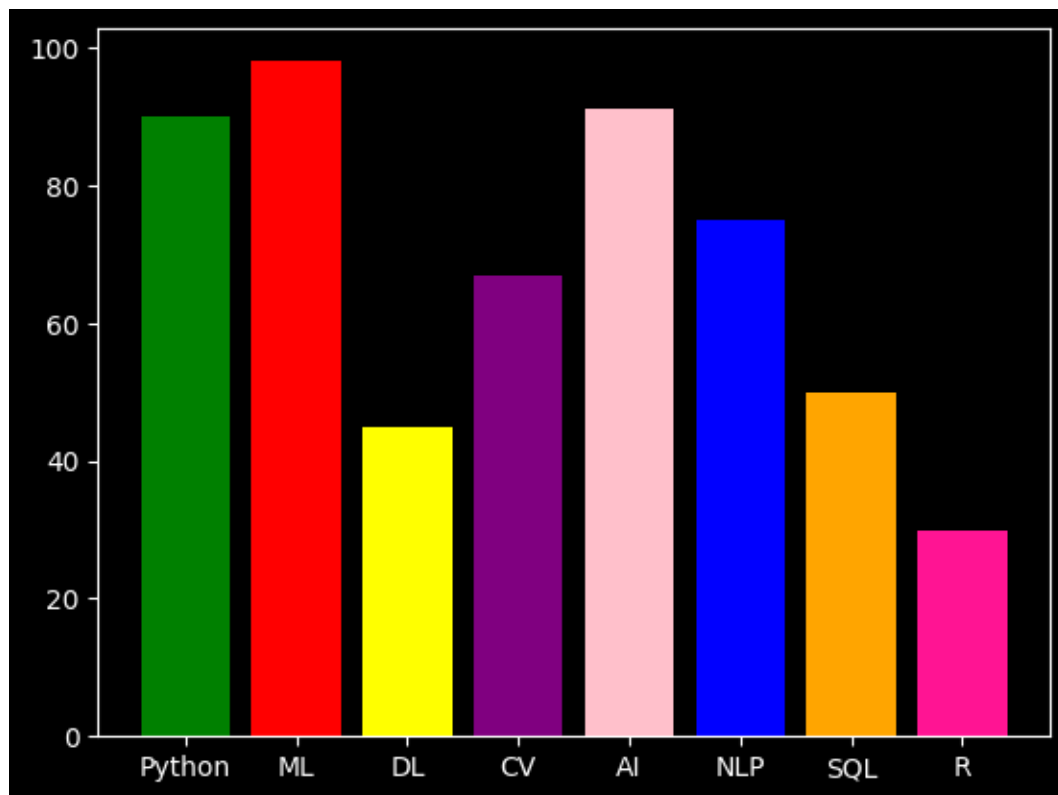


add Codeadd Markdown

[127]:



```
colors = ['green', 'red', 'yellow', 'purple', 'pink', 'blue', 'orange', 'deeppink']  
plt.bar(subjects, rank, color = colors)  
plt.show()
```

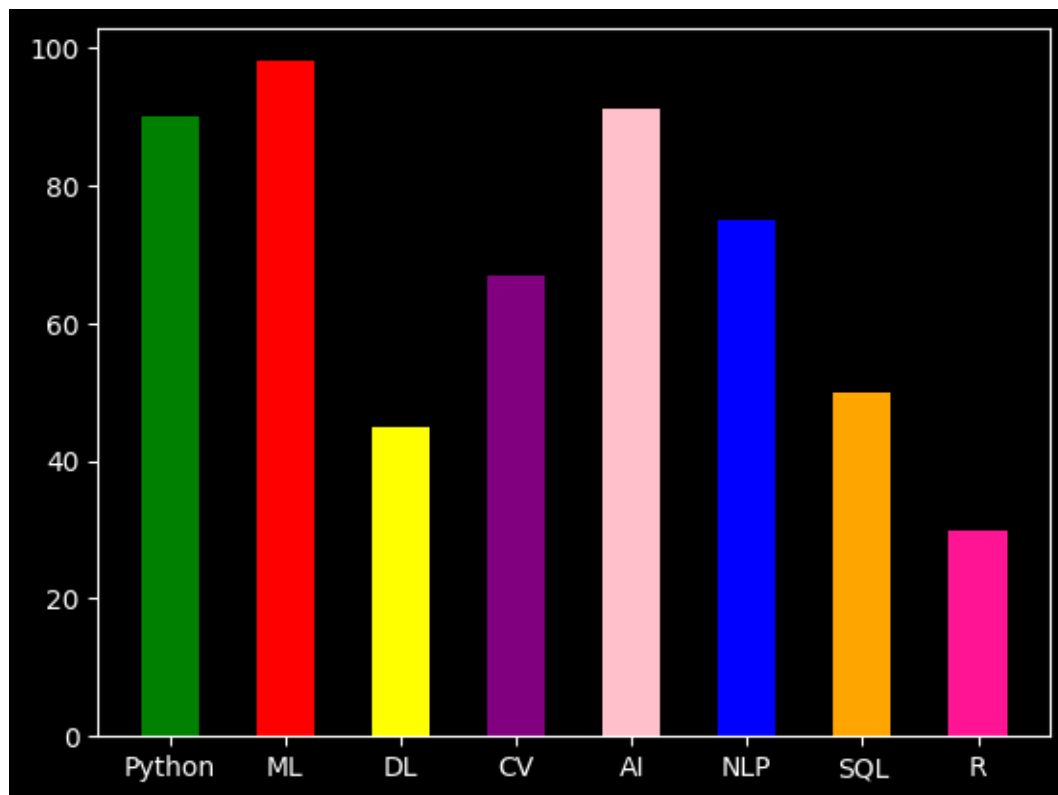


add Codeadd Markdown

[136]:

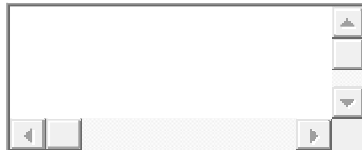


```
plt.bar(subjects, rank, color = colors, width = 0.5)  
plt.show()
```

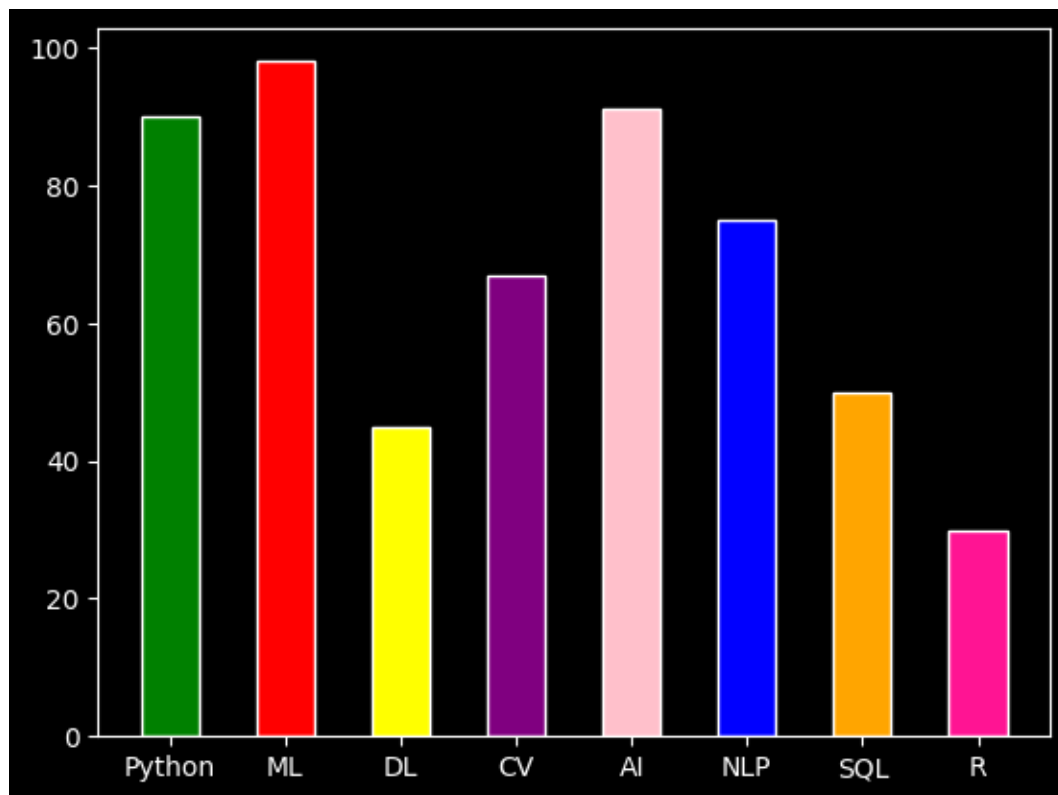


add Codeadd Markdown

[128]:



```
plt.bar(subjects,rank,color = colors,width = 0.5,edgecolor = 'white')  
plt.show()
```

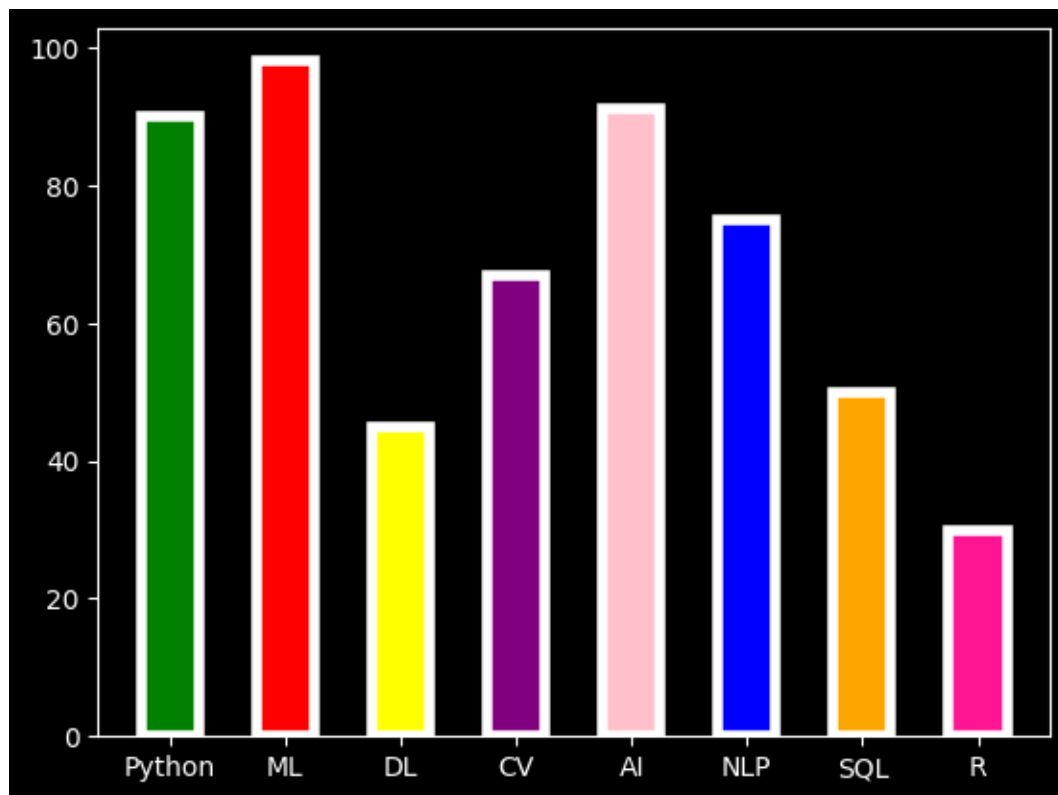


add Codeadd Markdown

[129]:

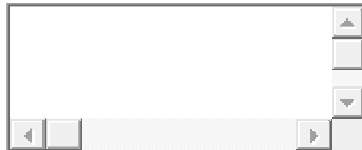


```
plt.bar(subjects, rank, color = colors, width = 0.5, edgecolor = 'white', linewidth = 4)
plt.show()
```

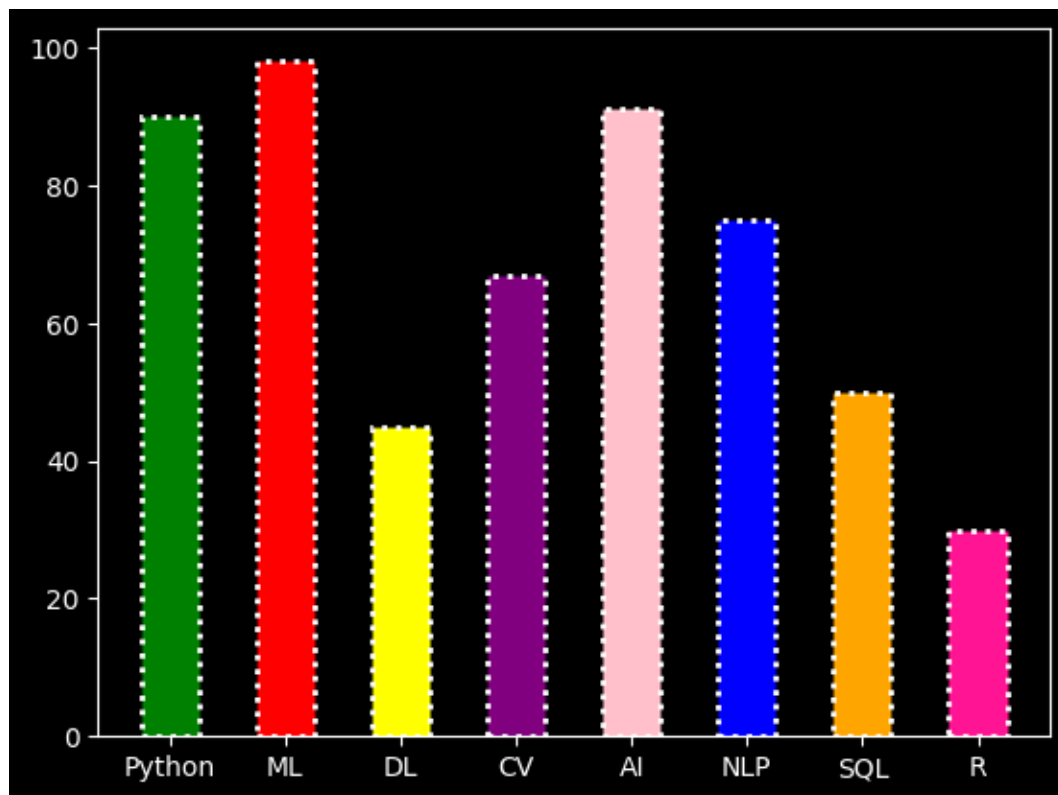


add Codeadd Markdown

[134]:



```
plt.bar(subjects,rank,color = colors,width = 0.5,edgecolor = 'white',linewidth = 2,linestyle = ':' )  
plt.show()
```

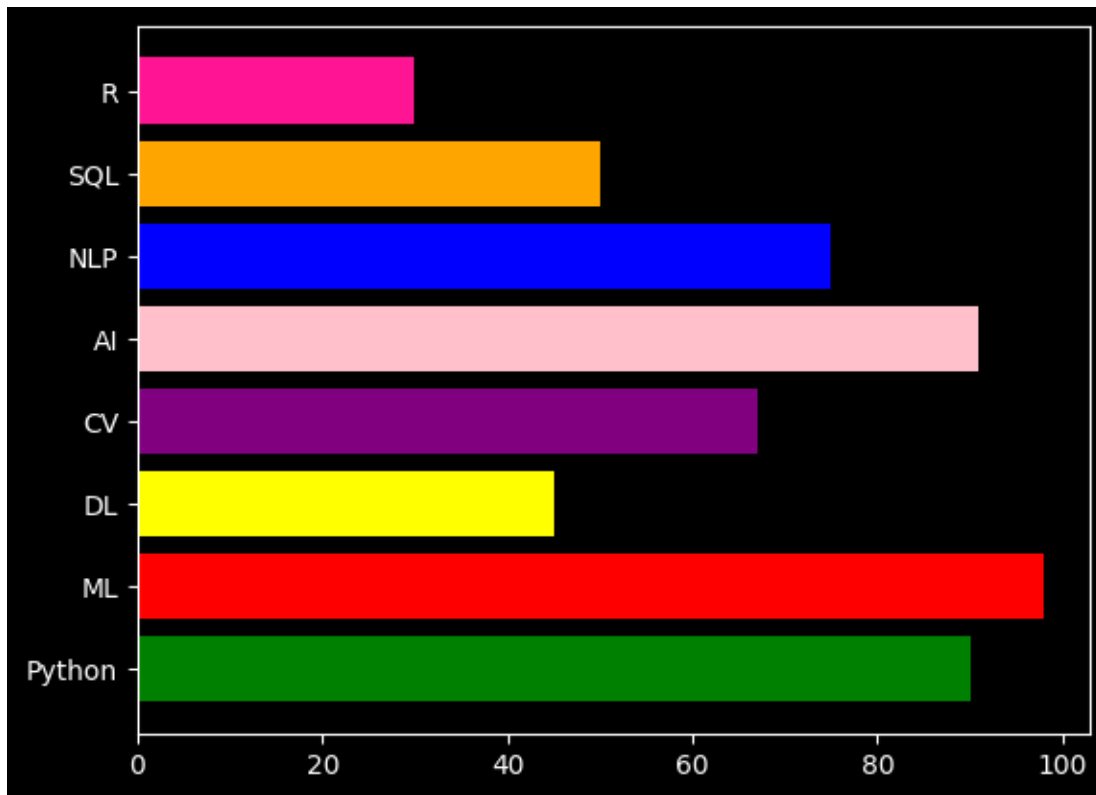



add Codeadd Markdown

[135]:



```
plt.barh(subjects, rank, color = colors)
plt.show()
```



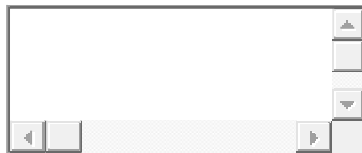
add Codeadd Markdown

[137]:



```
subjects = ['Python', 'ML', 'DL', 'CV', 'AI', 'NLP', 'SQL', 'R']
rank = [90, 98, 45, 67, 91, 75, 50, 30]
value = [20, 25, 35, 40, 55, 60, 65, 70]
add Codeadd Markdown
```

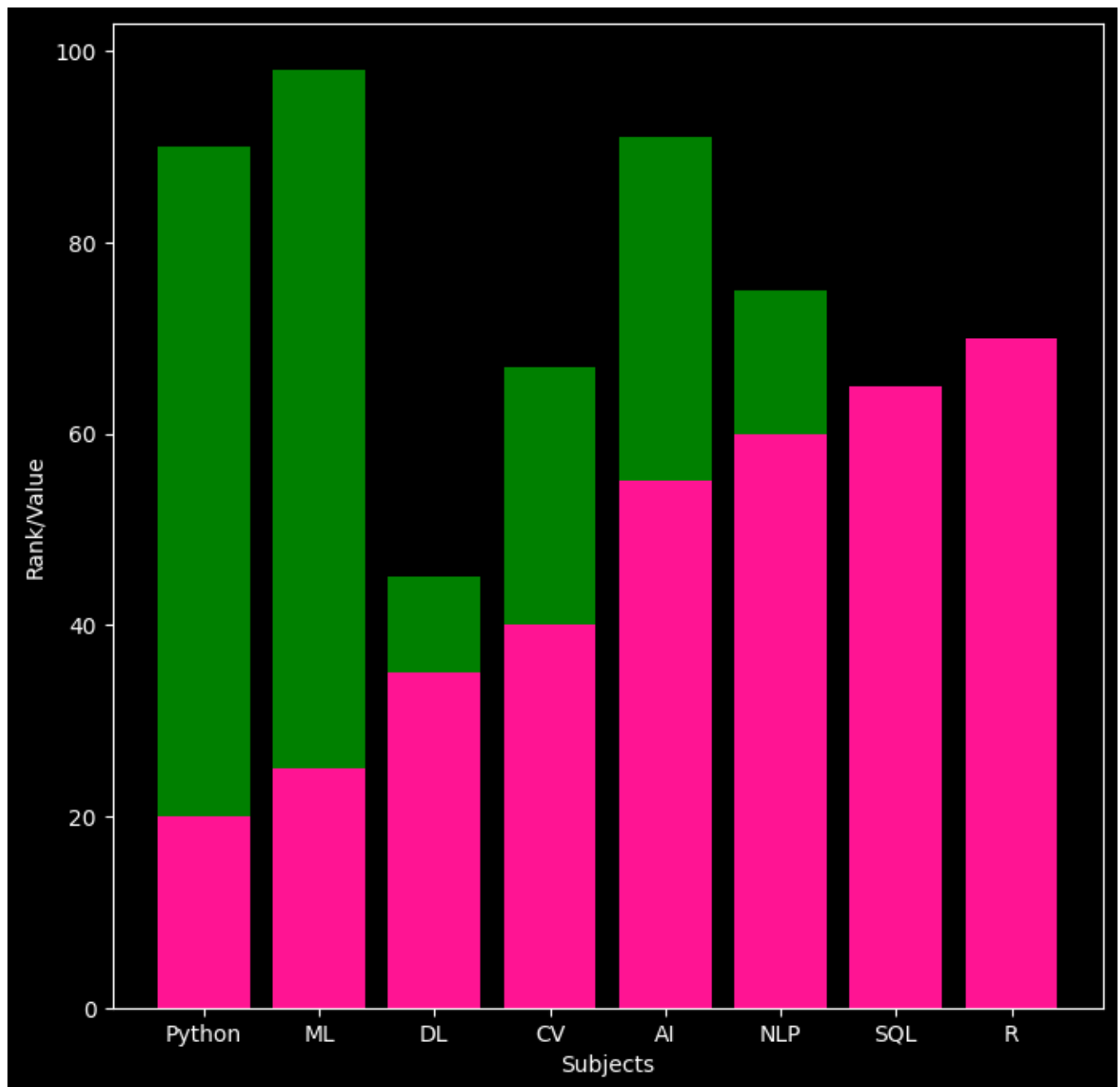
[154]:



```
plt.figure(figsize = (8,8))
plt.bar(subjects, rank, color = 'green')
plt.bar(subjects, value, color = 'deeppink')

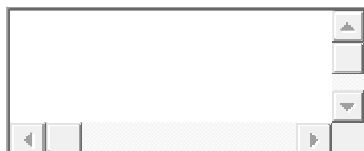
plt.xlabel('Subjects')
plt.ylabel('Rank/Value')

plt.show()
```



add Codeadd Markdown

[142]:



```
subjects_len = np.arange(len(subjects))  
width = 0.4
```

add Codeadd Markdown

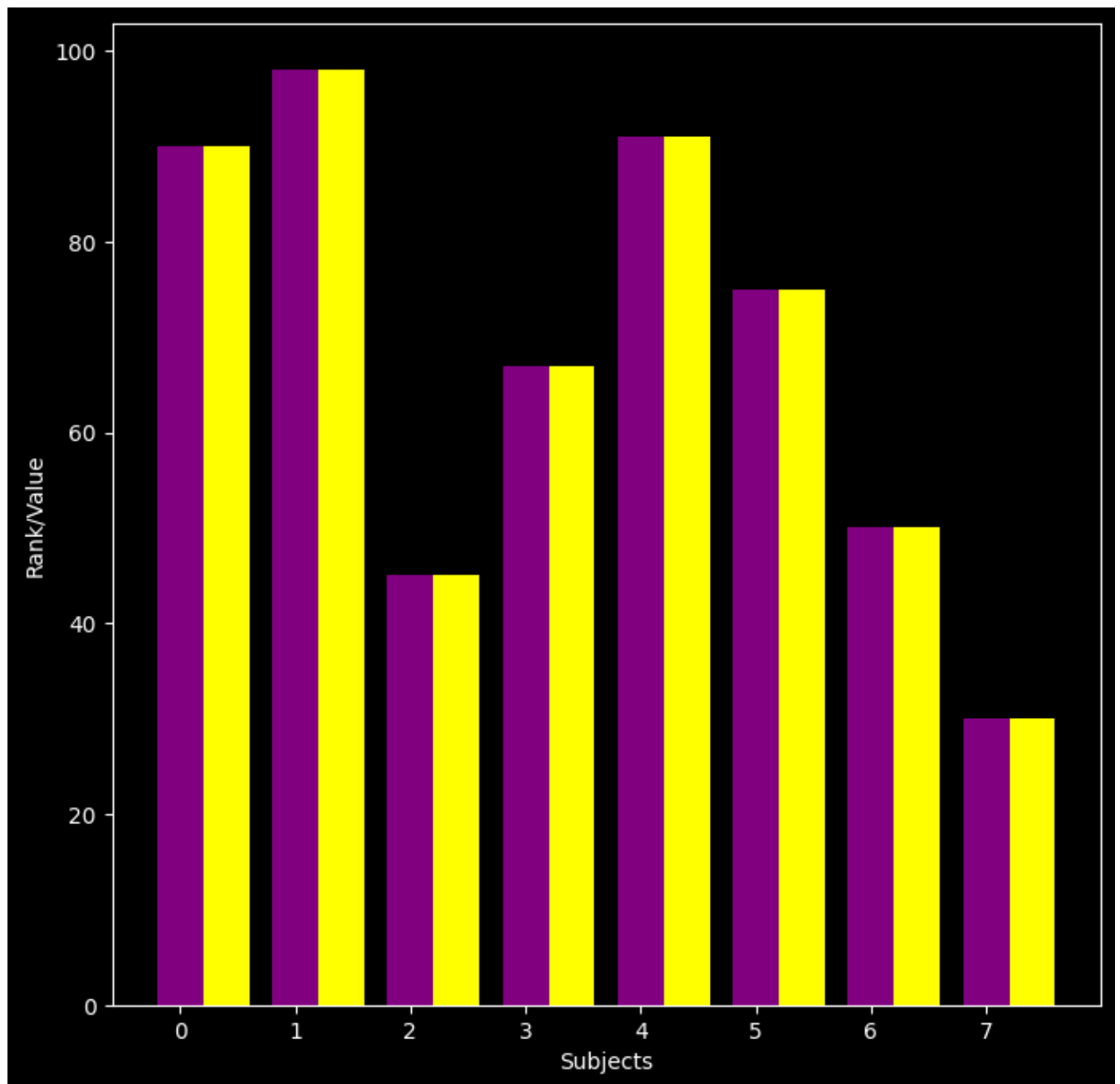
[156]:



```
plt.figure(figsize = (8,8))
plt.bar(subjects_len, rank, color = 'purple', width = width)
plt.bar(subjects_len+width, rank, color = 'yellow', width = width)

plt.xlabel('Subjects')
plt.ylabel('Rank/Value')

plt.show()
```



add Codeadd Markdown

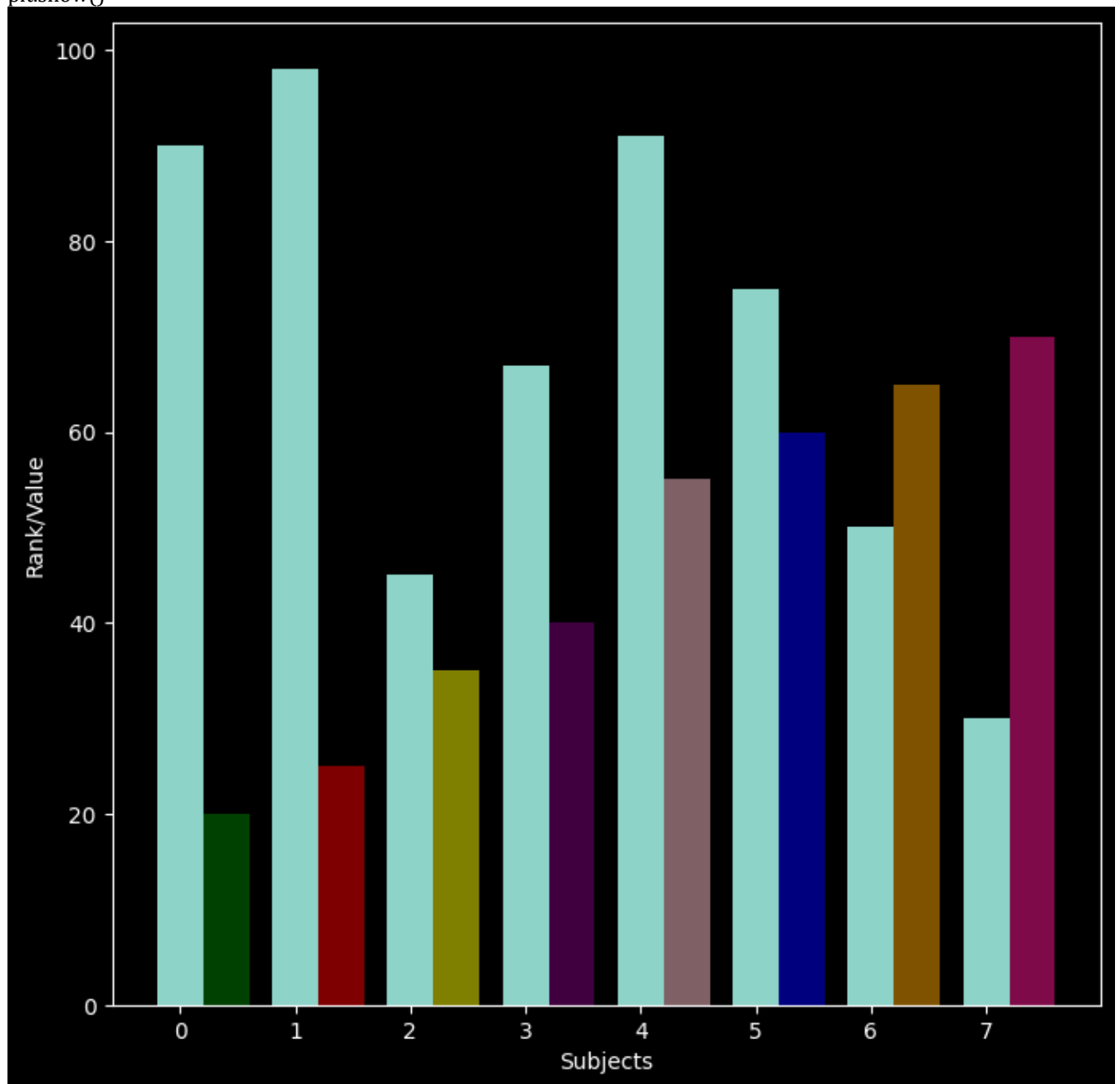
[157]:



```
plt.figure(figsize = (8,8))
plt.bar(subjects_len, rank, width = width)
plt.bar(subjects_len+width, value, width = width, color = colors, alpha = 0.5)

plt.xlabel('Subjects')
plt.ylabel('Rank/Value')
```

```
plt.show()
```



add Codeadd Markdown

****#plotting a bar plot from Supermarket Dataset**

add Codeadd Markdown

[158]:



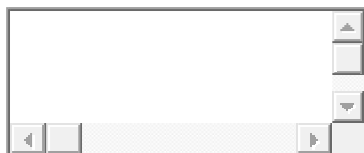
```
df = pd.read_csv('/kaggle/input/supermarket-dataset/SUPERMARKET.csv')
df.head()
```

[158]:

	Invoice ID	Branch	City	Customer type	Gender	Product line	Unit price	Quantity	Tax 5%	Total	Date	Time	Payment	costs	gross margin percentage	gross income	Rating
0	750-67-8428	A	Yan gon	Member	Female	Health and beauty	74.69	7	26.1415	548.9715	1/5/2019	13:08	Ewallet	522.83	4.761905	26.1415	9.1
1	226-31-3081	C	Nay pyi town	Normal	Female	Electronic accessories	15.28	5	3.8200	80.2200	3/8/2019	10:29	Cash	76.40	4.761905	3.8200	9.6
2	631-41-3108	A	Yan gon	Normal	Male	Home and lifestyle	46.33	7	16.2155	340.5255	3/3/2019	13:23	Credit card	324.31	4.761905	16.2155	7.4
3	123-19-1176	A	Yan gon	Member	Male	Health and beauty	58.22	8	23.2880	489.0480	1/27/2019	20:33	Ewallet	465.76	4.761905	23.2880	8.4
4	373-73-7910	A	Yan gon	Normal	Male	Sports and travel	86.31	7	30.2085	634.3785	2/8/2019	10:37	Ewallet	604.17	4.761905	30.2085	5.3

```
add Codeadd Markdown
```

[164]:



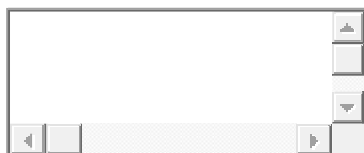
```
Payment_df = pd.DataFrame(df['Payment'].value_counts())  
Payment_df
```

[164]:

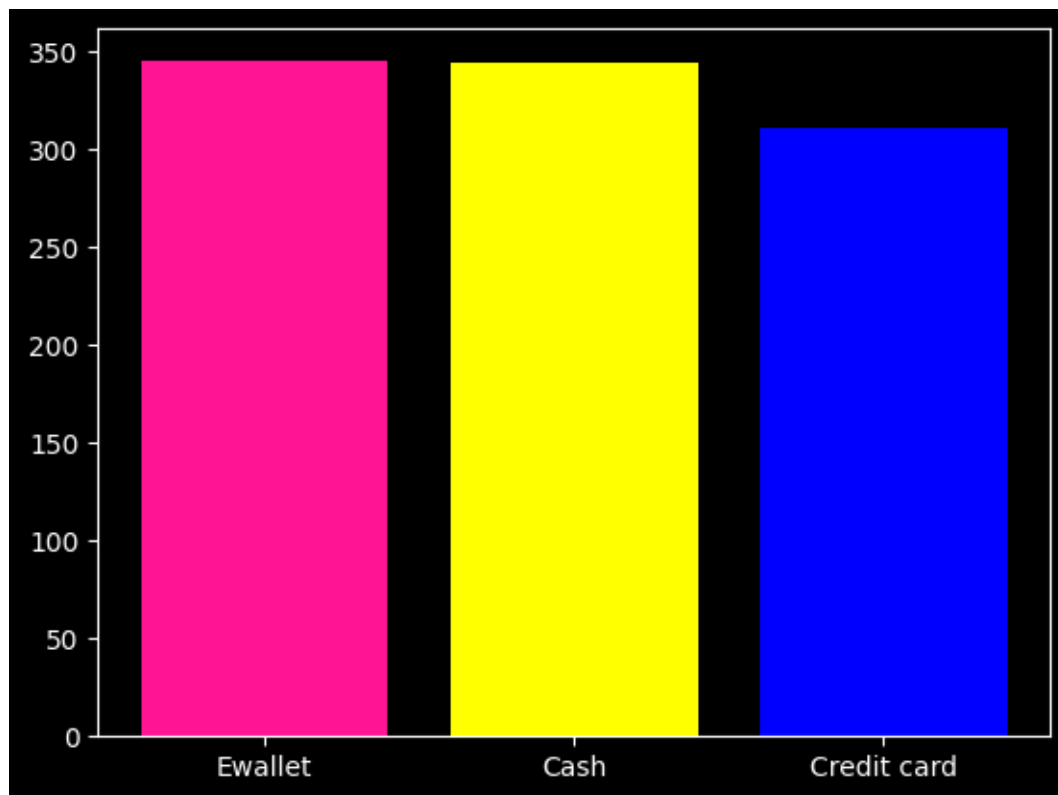
Payment	
Ewallet	345
Cash	344
Credit card	311

add Codeadd Markdown

[165]:



```
colors = ['deeppink', 'yellow', 'blue']  
plt.bar(Payment_df.index, Payment_df['Payment'], color = colors)  
plt.show()
```

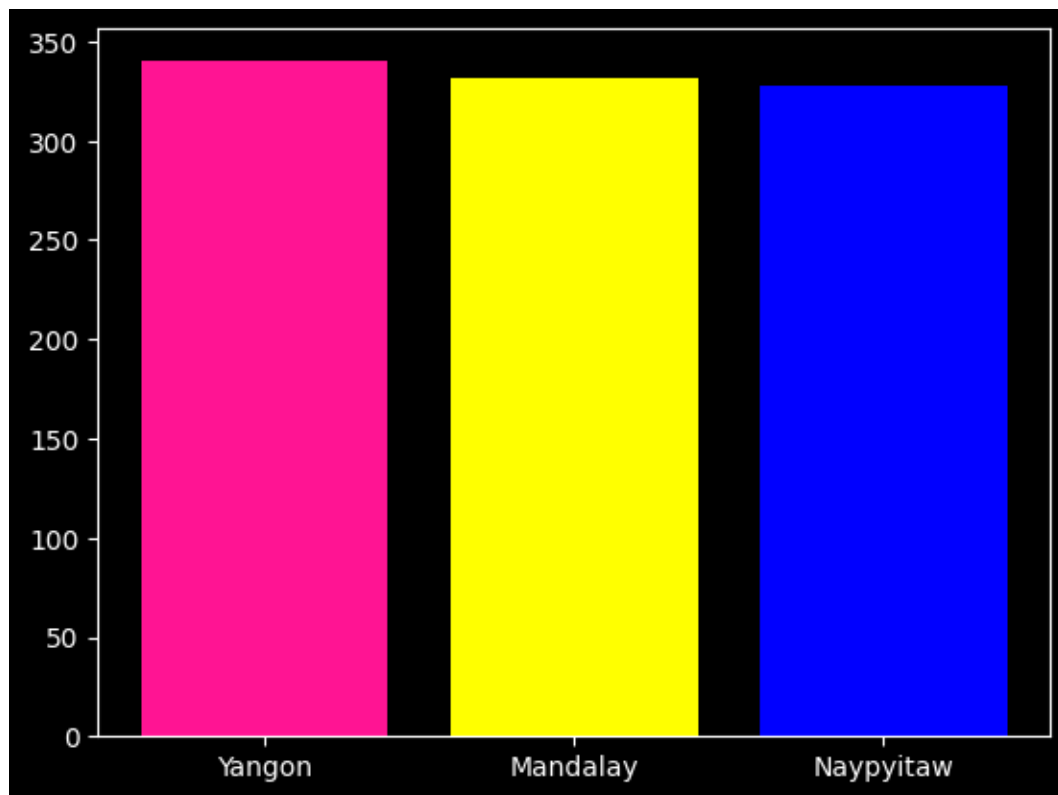



add Codeadd Markdown

[166]:

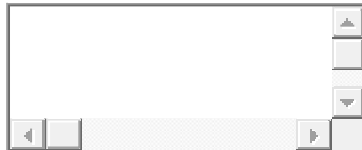


```
City_df = pd.DataFrame(df['City'].value_counts())
City_df
colors = ['deeppink', 'yellow', 'blue']
plt.bar(City_df.index, City_df['City'], color = colors)
plt.show()
```

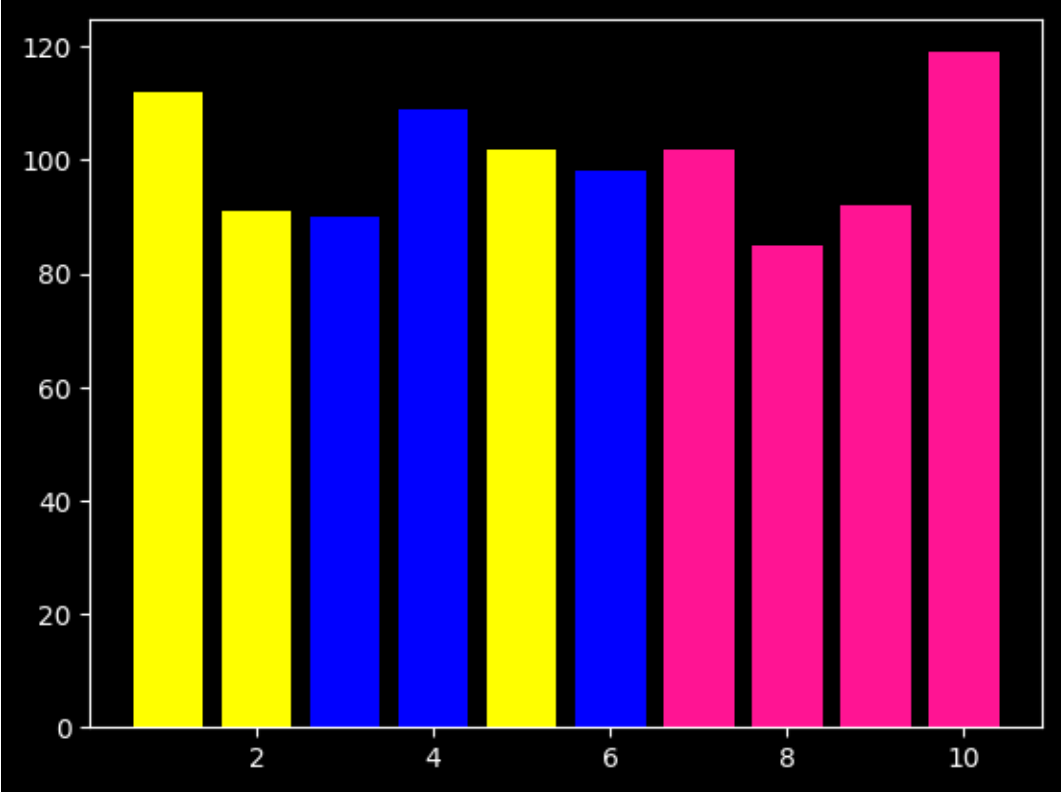


add Codeadd Markdown

[176]:



```
Quantity_df = pd.DataFrame(df['Quantity'].value_counts())
Quantity_df
colors = ['deeppink', 'yellow', 'blue']
plt.bar(Quantity_df.index, Quantity_df['Quantity'], color = colors)
plt.show()
```



add Codeadd Markdown

Hist plot in Matplotlib****

add Codeadd Markdown



```
import matplotlib.pyplot as plt
import numpy as np
import pandas as pd
```

add Codeadd Markdown

[177]:



```
marks_50_student = np.random.randint(0,100,(50))
marks_50_student
```

[178]:

```
array([25, 48,  6, 88, 54, 61, 36, 14, 17, 26, 70, 65, 77, 13, 21, 59, 17,
        5, 19, 81, 73, 76, 44, 76, 81, 55, 61, 70, 77, 33, 33, 46, 94, 32,
        31, 90, 61, 65,  2, 47, 14, 22,  6, 94, 37, 67, 38, 71,  0, 75])
```

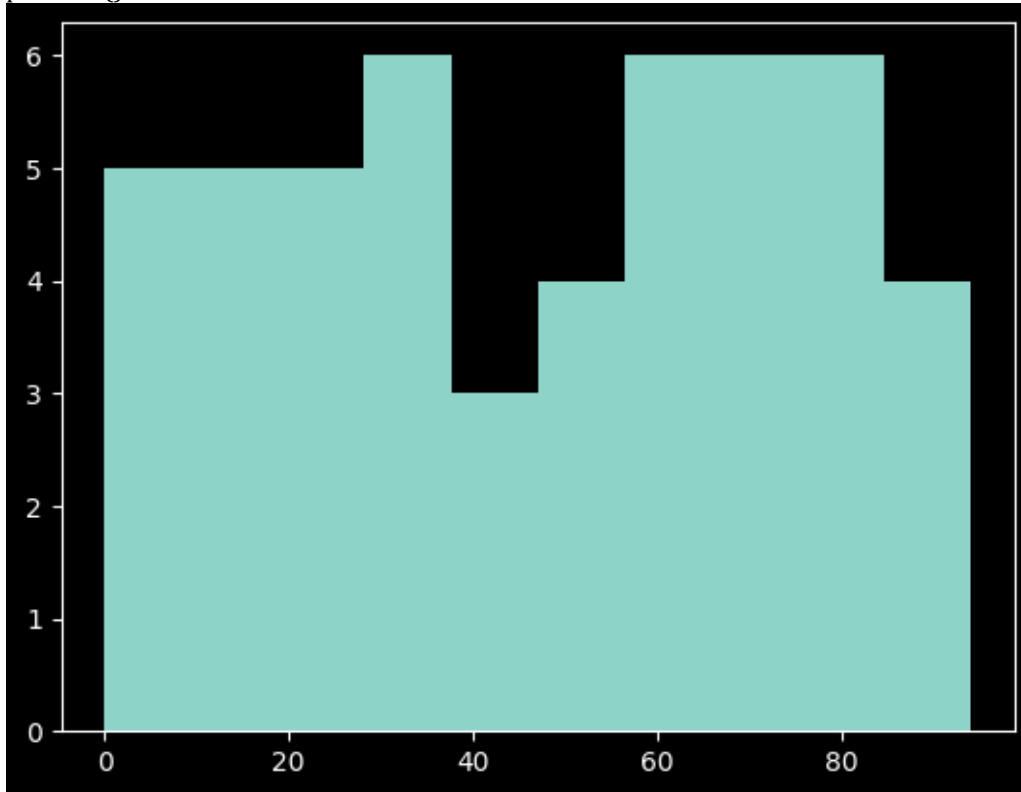
[178]:

add Codeadd Markdown

[180]:



```
plt.hist(marks_50_student)
plt.show()
```



add Codeadd Markdown

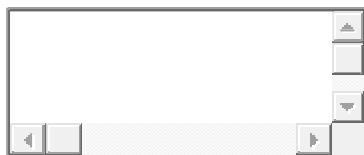
[181]:



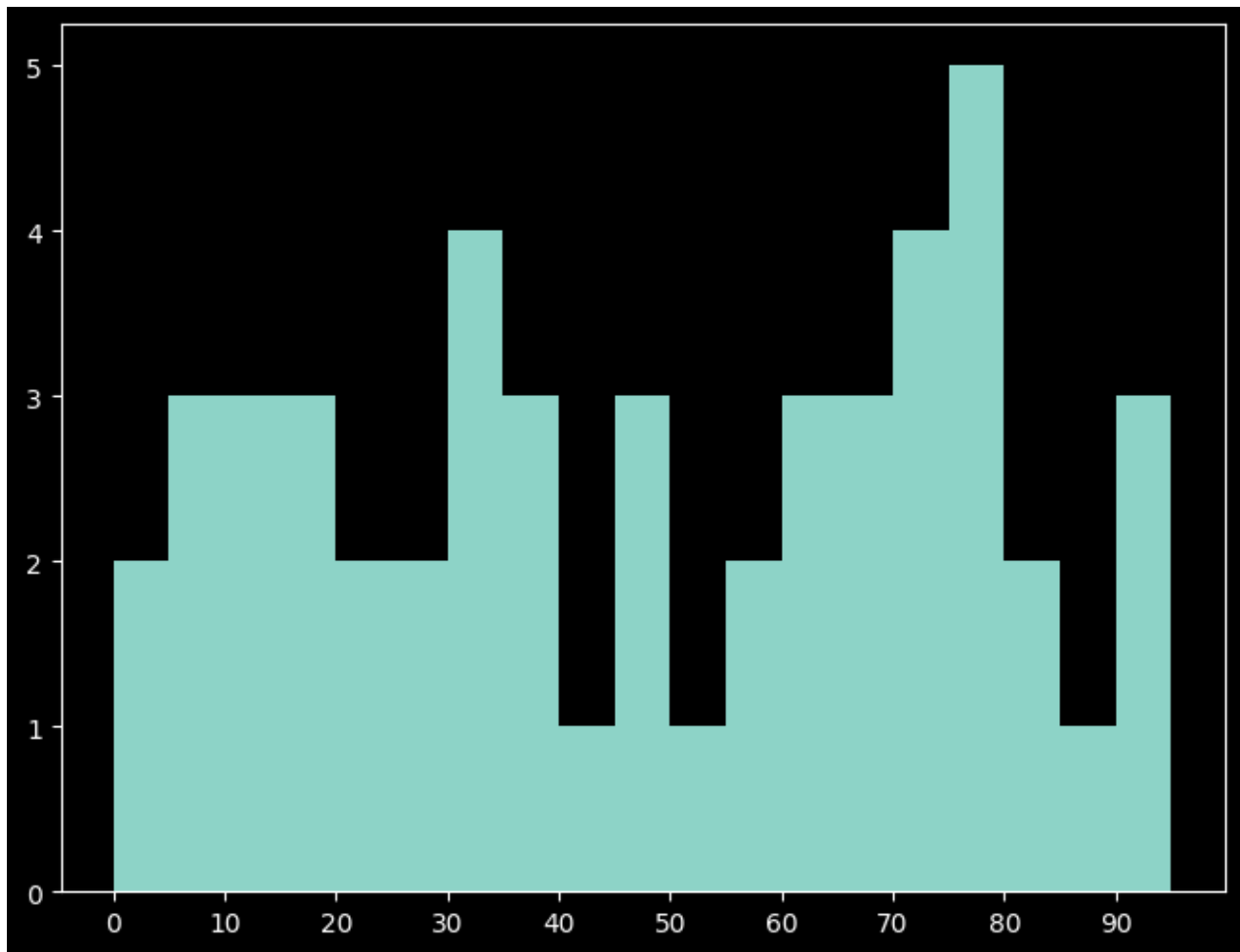
```
bins = np.arange(0,100,5)
```

add Codeadd Markdown

[185]:



```
plt.figure(figsize = (8,6))
plt.hist(marks_50_student, bins = bins)
plt.xticks(np.arange(0,100,10))
plt.show()
```

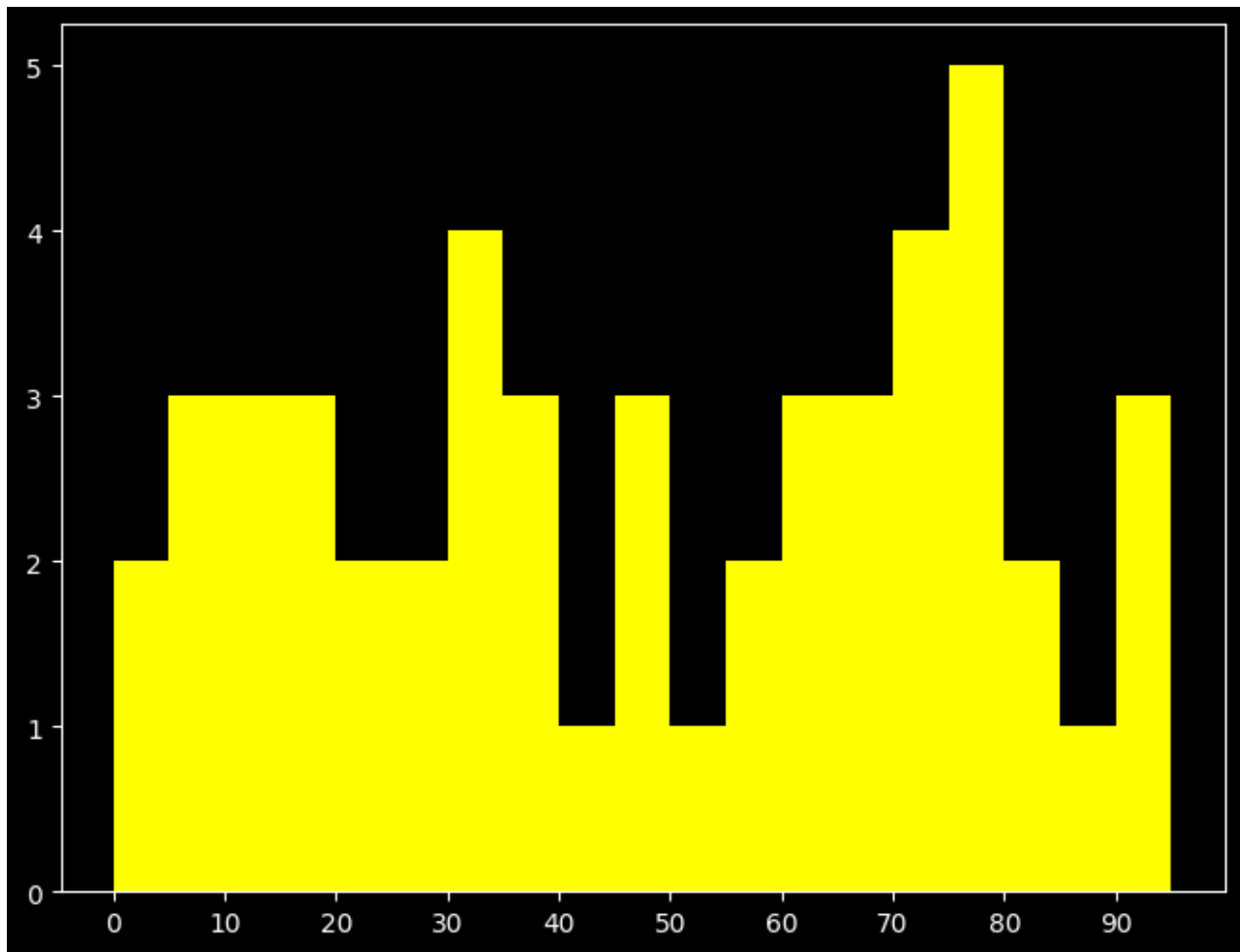


add Codeadd Markdown

[186]:



```
bins = np.arange(0,100,5)
plt.figure(figsize = (8,6))
plt.hist(marks_50_student, bins = bins, color= 'yellow')
plt.xticks(np.arange(0,100,10))
plt.show()
```

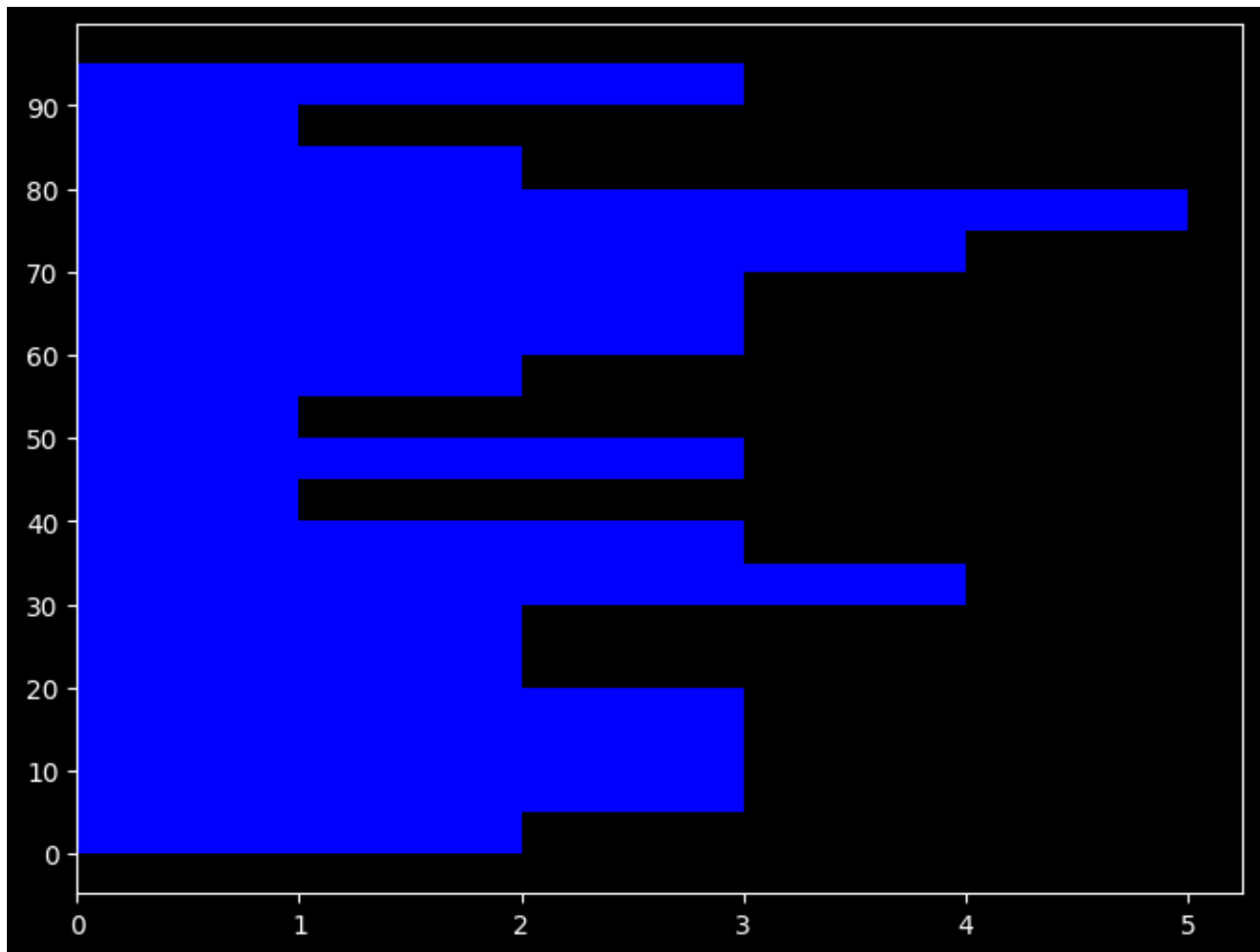


add Codeadd Markdown

[190]:



```
bins = np.arange(0,100,5)
plt.figure(figsize = (8,6))
plt.hist(marks_50_student, bins = bins, color= 'blue', orientation = 'horizontal')
plt.yticks(np.arange(0,100,10))
plt.show()
```

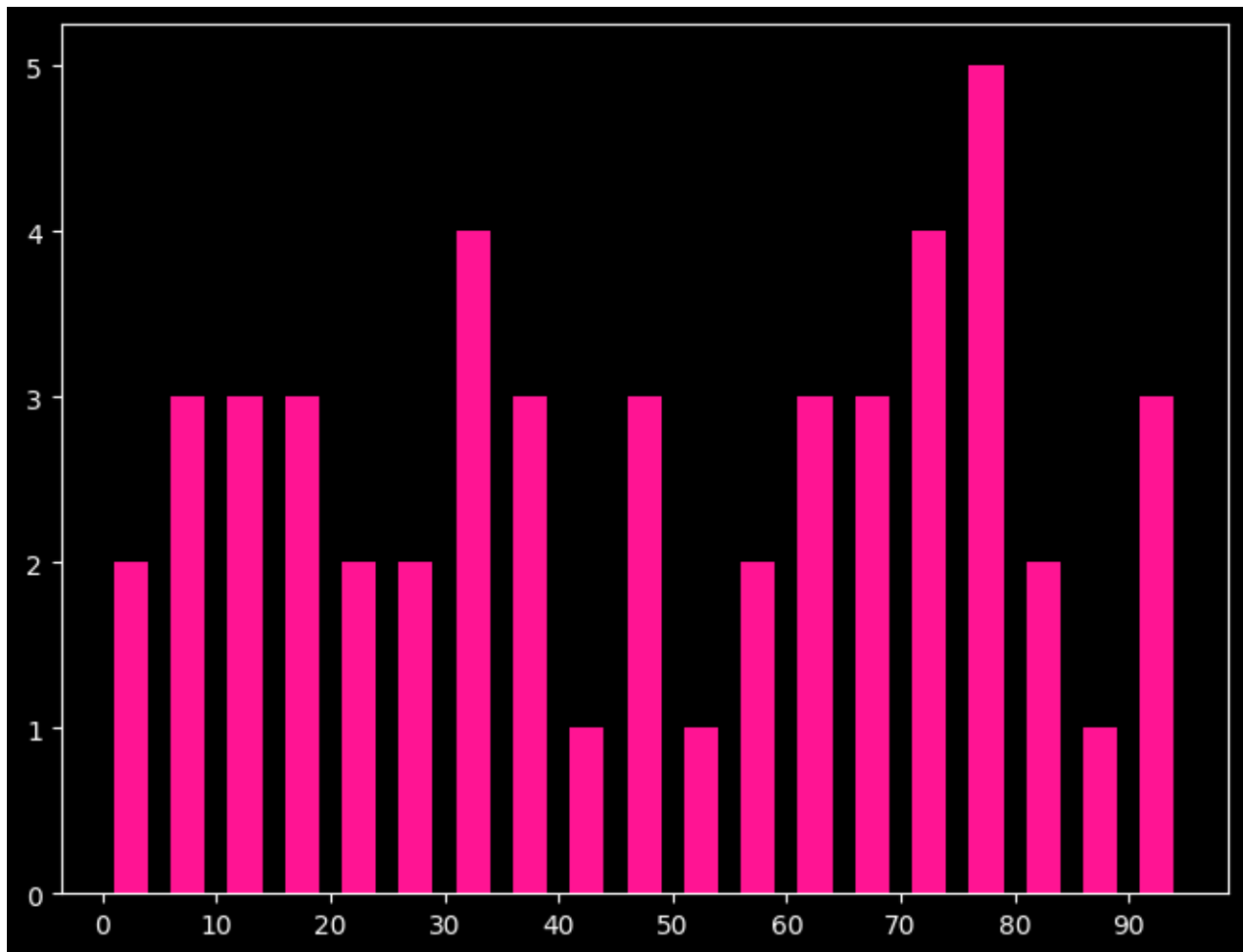


add Codeadd Markdown

[191]:



```
bins = np.arange(0,100,5)
plt.figure(figsize = (8,6))
plt.hist(marks_50_student, bins = bins, color= 'deeppink', rwidth = 0.6)
plt.xticks(np.arange(0,100,10))
plt.show()
```

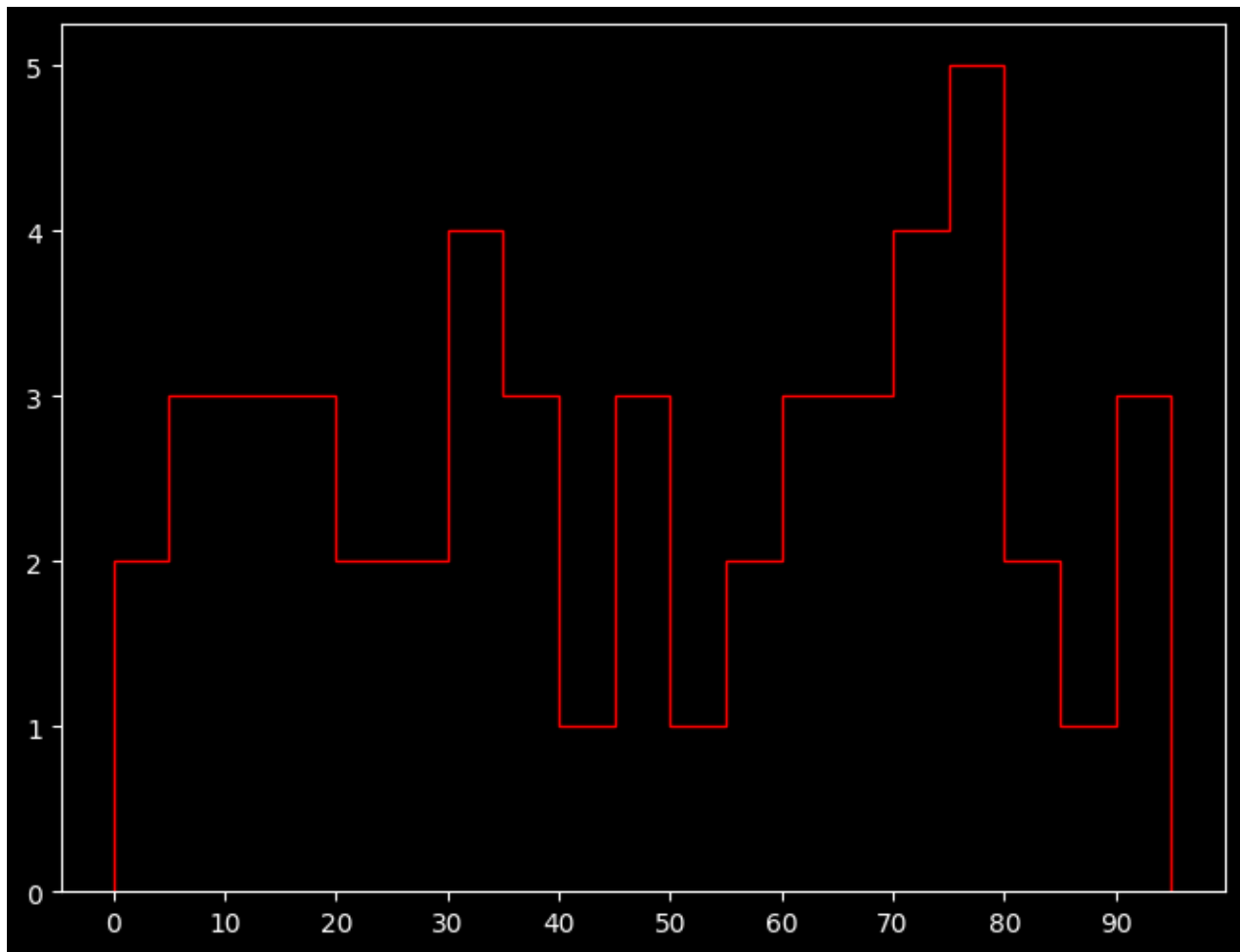


add Codeadd Markdown

[196]:



```
bins = np.arange(0,100,5)
plt.figure(figsize = (8,6))
plt.hist(marks_50_student, bins = bins, color= 'red', histtype = 'step')
plt.xticks(np.arange(0,100,10))
plt.show()
```

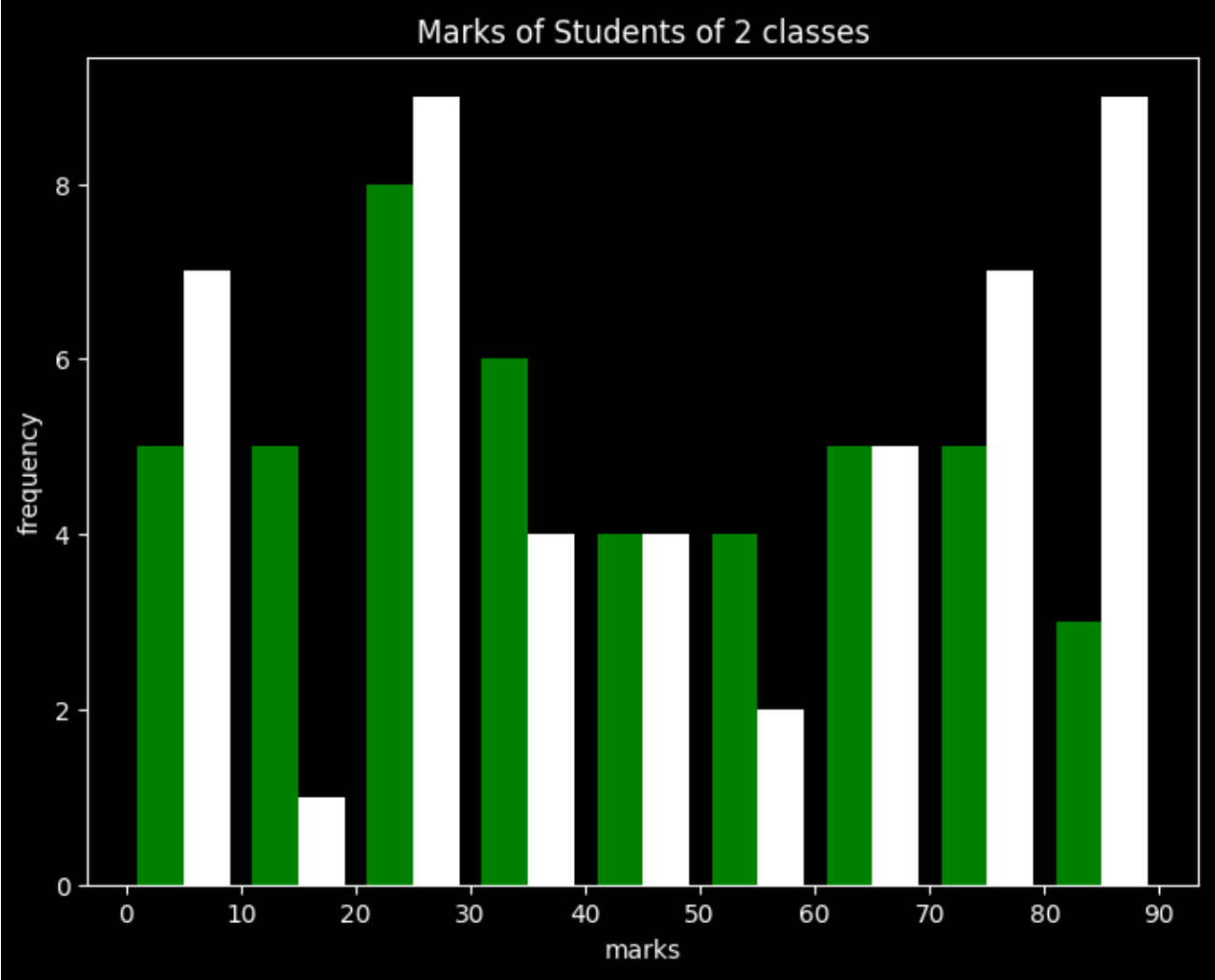
add Codeadd Markdown

[199]:



```
marks_50_student1 = np.random.randint(0,100,(50))
marks_50_student2 = np.random.randint(0,100,(50))
bins = np.arange(0,100,10)
plt.figure(figsize = (8,6))
plt.hist([marks_50_student1, marks_50_student2], bins = bins, color= ['green', 'white'])
plt.xticks(np.arange(0,100,10))

plt.xlabel('marks')
plt.ylabel('frequency')
plt.title('Marks of Students of 2 classes')
plt.show()
```



add Codeadd Markdown

Pie Chart/ Pie PLOT in Matplotlib****

add Codeadd Markdown

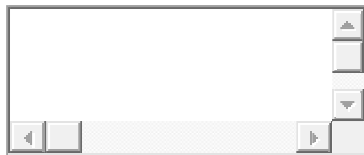
[200]:



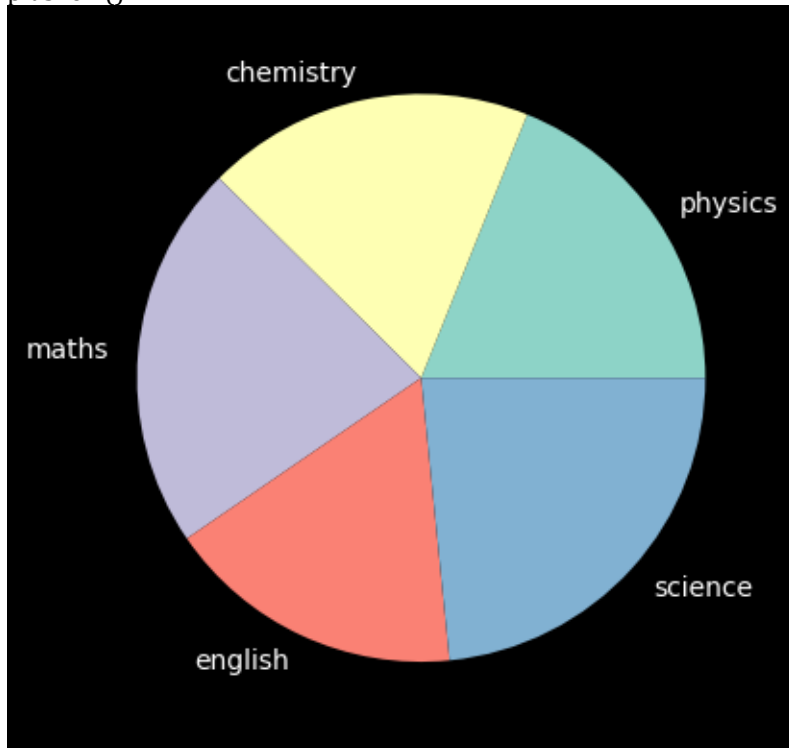
```
classes = ['physics', 'chemistry', 'maths', 'english', 'science']
marks = [80, 79, 93, 72, 99]
```

add Codeadd Markdown

[202]:

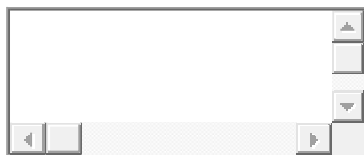


```
plt.pie(marks, labels = classes)  
plt.show()
```

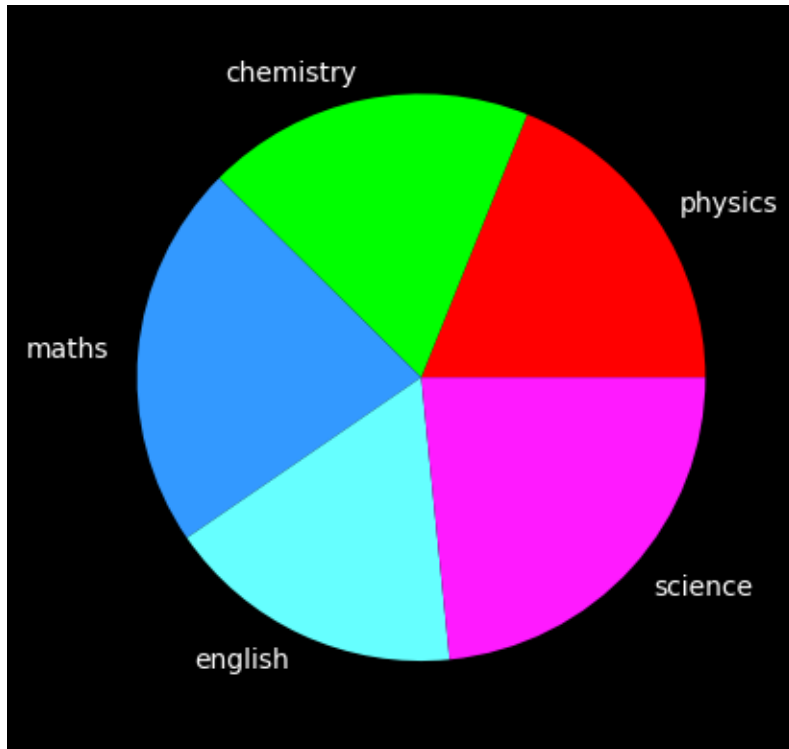


[add Code](#)[add Markdown](#)

[206]:

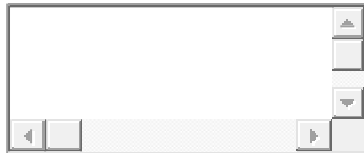


```
colors = ['#ff0000', '#00ff00', '#3399ff', '#66ffff', '#ff1aff']  
plt.pie(marks, labels = classes, colors = colors)  
plt.show()
```

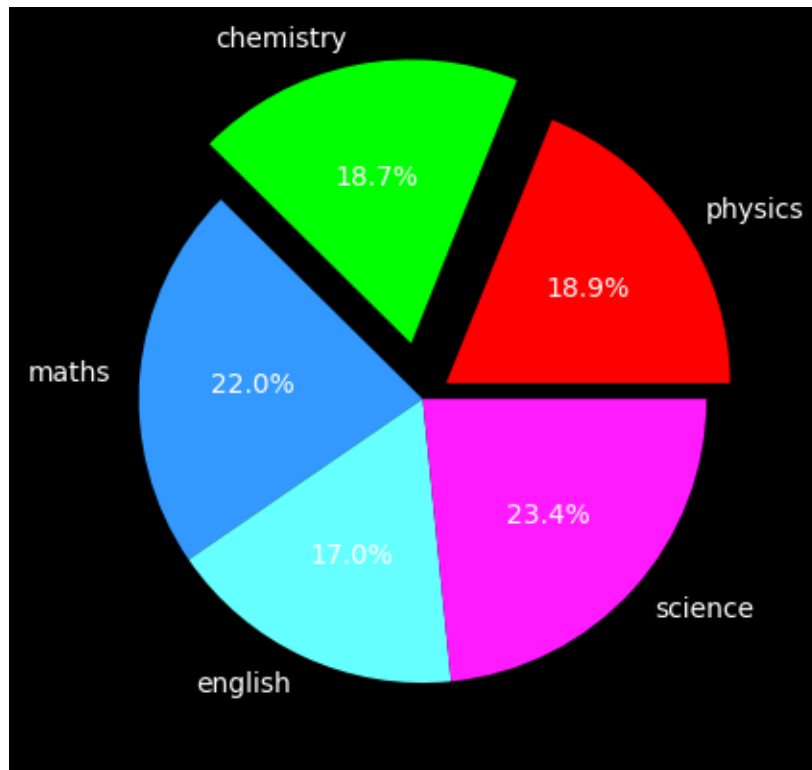


[add Code](#)[add Markdown](#)

[208]:



```
explode_values = [0.1,0.2,0,0,0]
plt.pie(marks, labels = classes, colors = colors, autopct = '%0.1f%%', explode = explode_values)
plt.show()
```

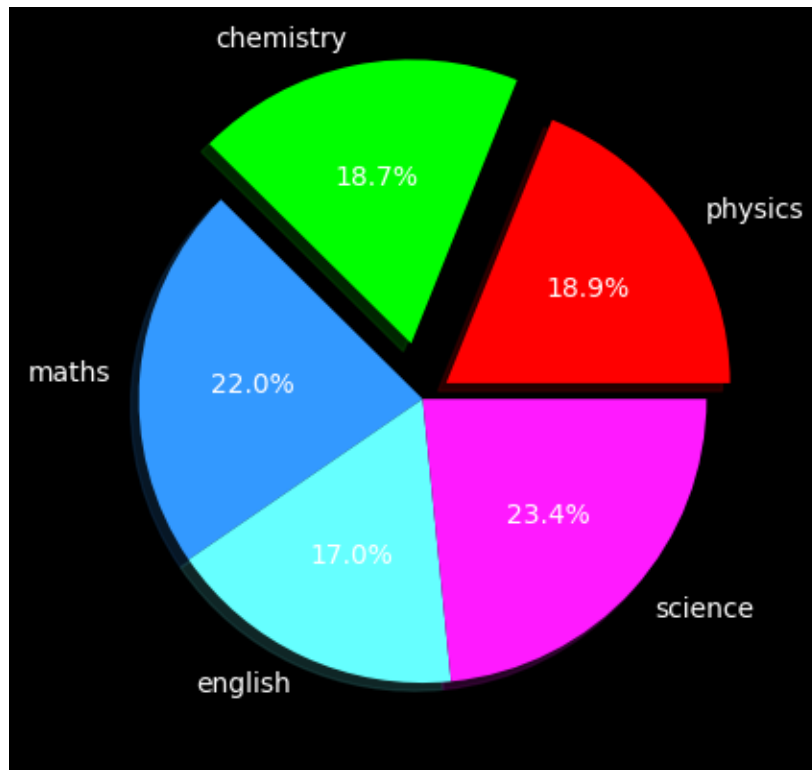


[add Code](#)[add Markdown](#)

[209]:

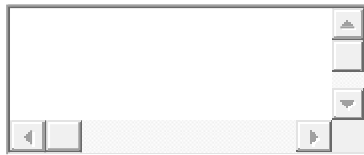


```
plt.pie(marks, labels = classes, colors = colors, autopct = '%0.1f%%', explode = explode_values, shadow =  
True)  
plt.show()
```

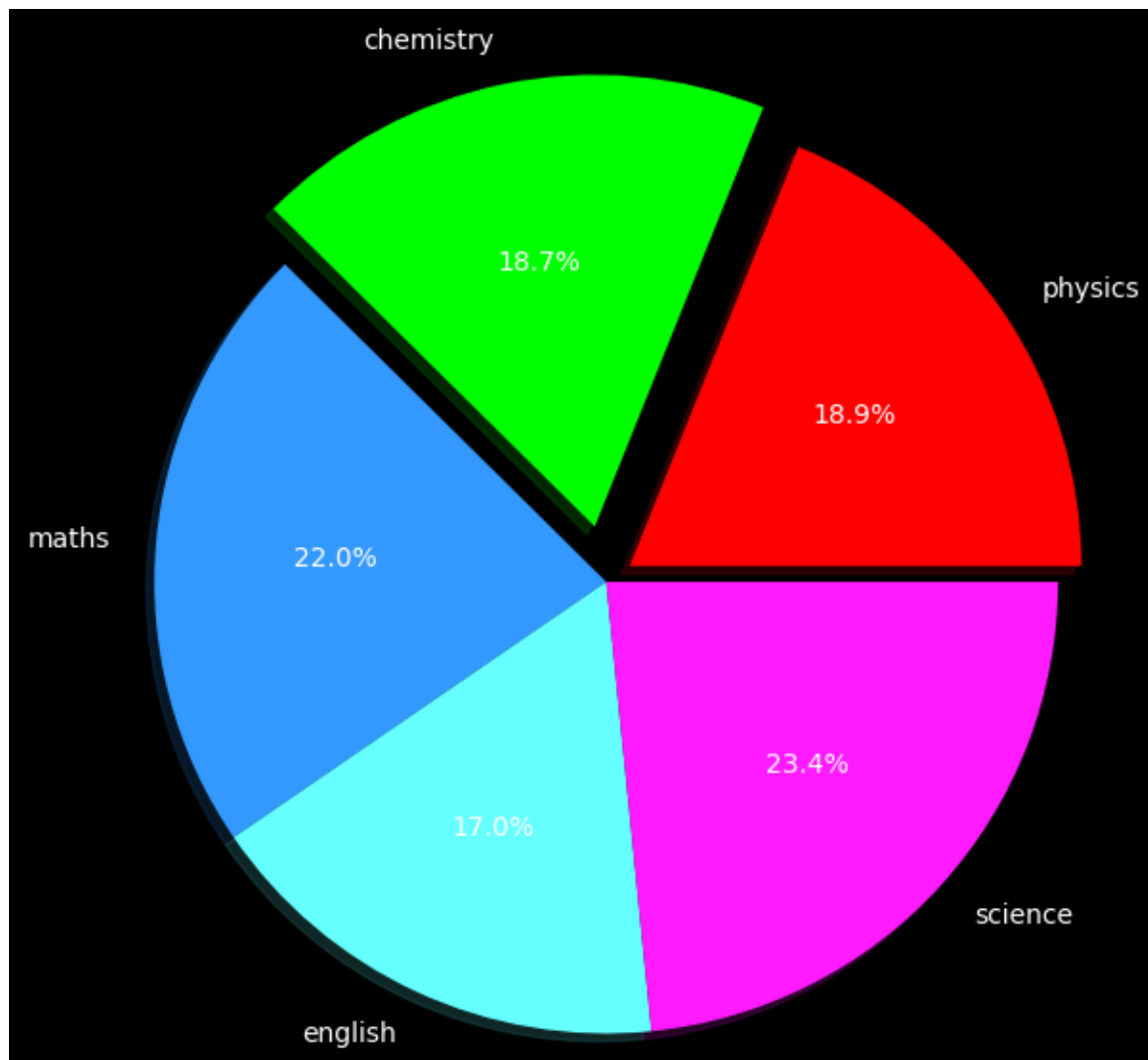


[add Code](#)[add Markdown](#)

[210]:



```
plt.pie(marks, labels = classes, colors = colors, autopct = '%0.1f%%', explode = explode_values, shadow =  
True, radius = 1.6)  
plt.show()
```



add Codeadd Markdown

[214]:



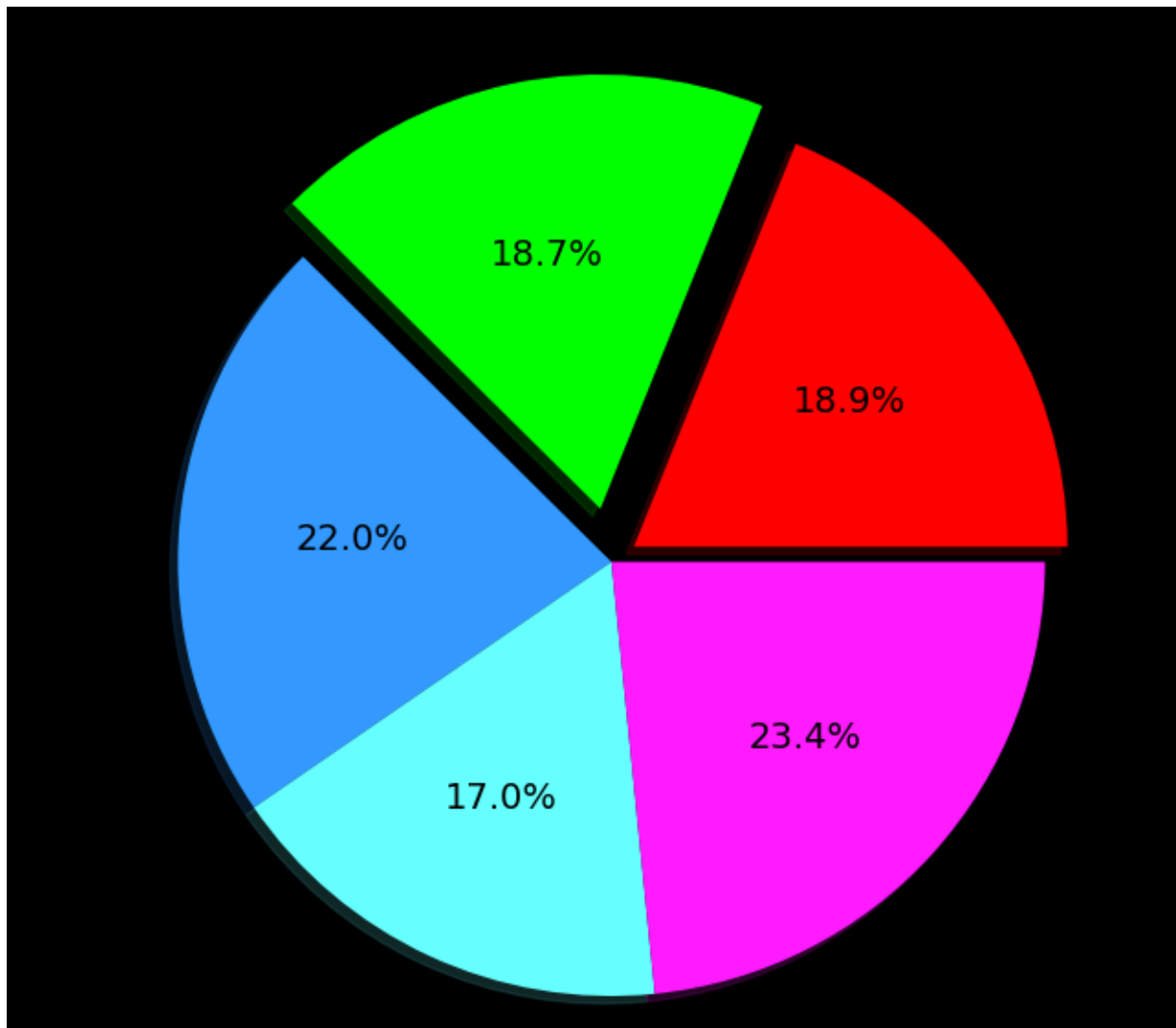
textprops = {'fontsize':14, 'color':'k'}

add Codeadd Markdown

[216]:

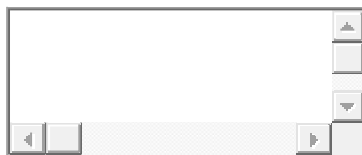


```
plt.pie(marks, labels = classes, colors = colors, autopct = '%0.1f%%', explode = explode_values,  
        shadow = True, radius = 1.6, textprops = textprops)  
plt.show()
```

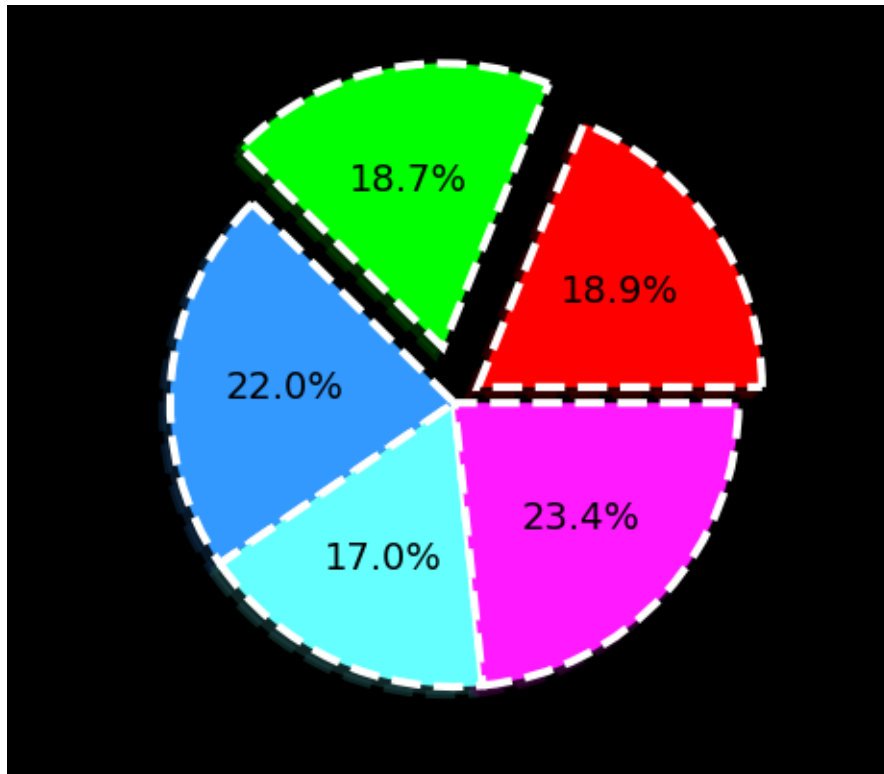


add Codeadd Markdown

[219]:

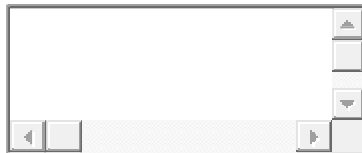


```
textprops = {'fontsize':14, 'color':'k'}
wedgeprops = {'linewidth':3, 'linestyle': '--', 'edgecolor': 'white'}
plt.pie(marks, labels = classes, colors = colors, autopct = '%0.1f%%', explode = explode_values,
        shadow = True, radius = 1, textprops = textprops, wedgeprops = wedgeprops)
plt.show()
```

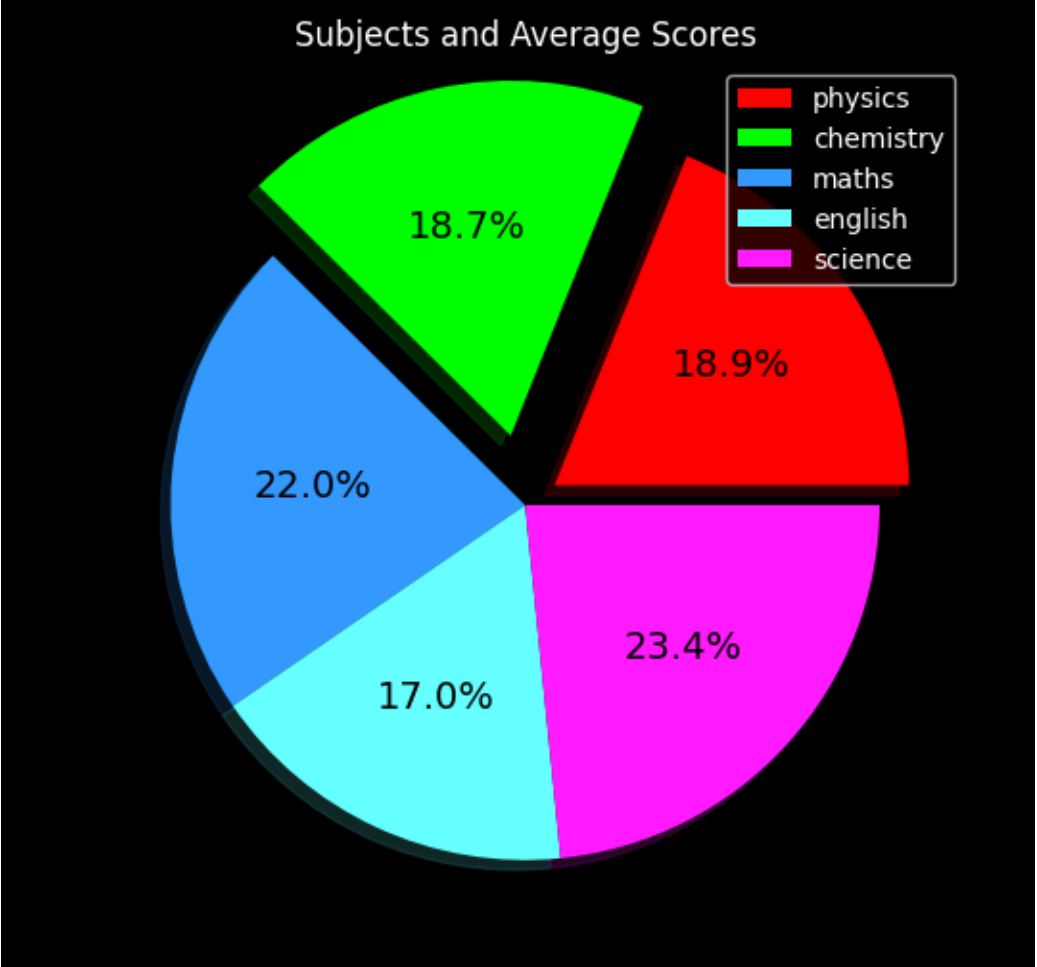



[add Code](#)[add Markdown](#)

[221]:

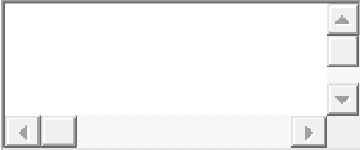


```
plt.figure(figsize = (6,6))
plt.pie(marks, labels = classes, colors = colors, autopct = '%0.1f%%', explode = explode_values,
        shadow = True, radius = 1, textprops = textprops)
plt.title('Subjects and Average Scores')
plt.legend()
plt.show()
```



add Codeadd Markdown

[222]:



```
df = pd.read_csv('/kaggle/input/supermarket-dataset/SUPERMARKET.csv')
df.head()
```

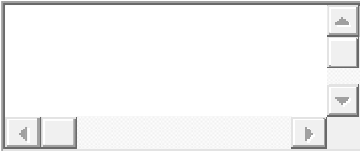
[222]:

	Inv oic e ID	Br an ch	City	Cus tom er type	Ge nd er	Pro duct line	U ni t pr ic e	Qu anti ty	Ta x 5%	Tot al	Dat e	Ti me	Pay me nt	co gs	gros s mar gin perc enta ge	gro ss inc om e	Ra tin g
0	750-67-	A	Yan gon	Me mbe r	Fe mal e	Heal th and	74.69	7	26.1415	548.9715	1/5/2019	13:08	Ew allet	522.83	4.761905	26.1415	9.1

	Invoice ID	Branch	City	Customer type	Gender	Product line	Unit price	Quantity	Tax 5%	Total	Date	Time	Payment	costs	gross margin percentage	gross income	Rating
1	8428					beauty											
	226-31-3081	C	Naypyitaw	Normal	Female	Electronic accessories	15.28	5	3.8200	80.2200	3/8/2019	10:29	Cash	76.40	4.761905	3.8200	9.6
2	631-41-3108	A	Yangon	Normal	Male	Home and lifestyle	46.33	7	16.2155	340.5255	3/3/2019	13:23	Credit card	324.31	4.761905	16.2155	7.4
3	123-19-1176	A	Yangon	Member	Male	Health and beauty	58.22	8	23.2880	489.0480	1/27/2019	20:33	Ewallet	465.76	4.761905	23.2880	8.4
4	373-73-7910	A	Yangon	Normal	Male	Sports and travel	86.31	7	30.2085	634.3785	2/8/2019	10:37	Ewallet	604.17	4.761905	30.2085	5.3

add Codeadd Markdown

[223]:



```
Payment_df = pd.DataFrame(df['Payment'].value_counts())
Payment_df
```

[223]:

Payment	
Ewallet	345
Cash	105

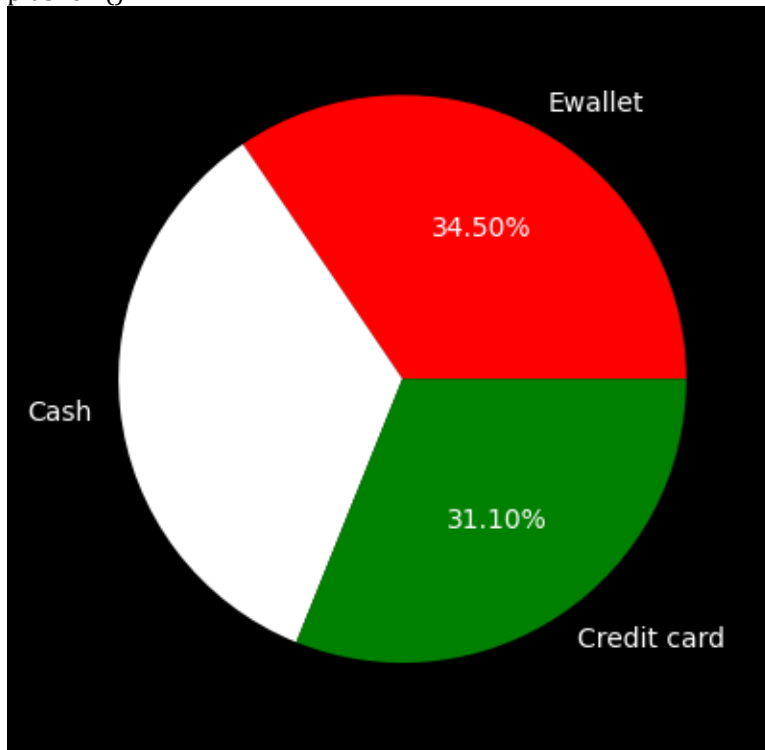
Payment	
Cash	344
Credit card	311

add Codeadd Markdown

[227]:



```
plt.pie(Payment_df['Payment'], labels = Payment_df.index,
        colors = ['red', 'white', 'green'], autopct = '%0.2f%%')
plt.show()
```



add Codeadd Markdown

Subplot in Matplotlib****

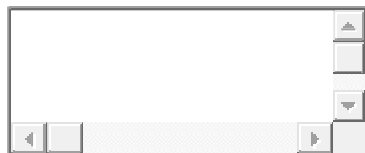
add Codeadd Markdown
 Type Markdown and LaTeX: α^2
 add Codeadd Markdown

[231]:



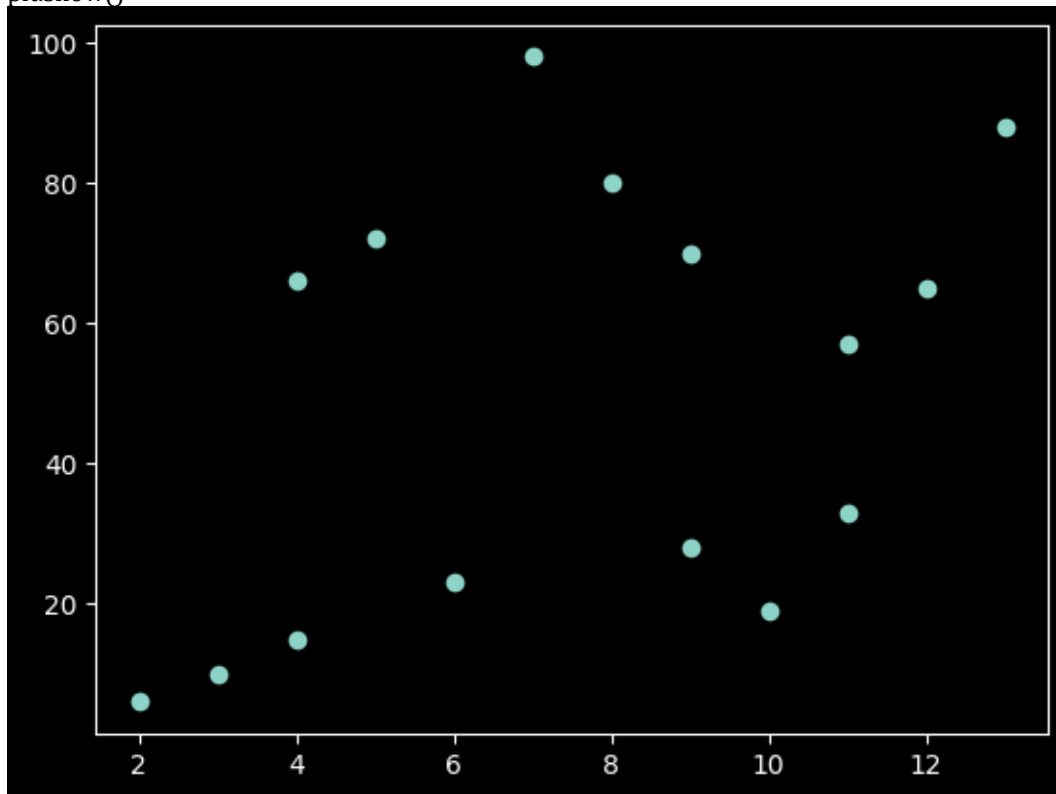
```
import matplotlib.pyplot as plt
import numpy as np
import pandas as pd
add Codeadd Markdown
```

[236]:



```
study_hours = [2,3,4,4,5,6,7,8,9,9,10,11,11,12,13]
marks = [6,10,15,66,72,23,98,80,70,28,19,33,57,65,88]
```

```
plt.scatter(study_hours, marks,)
plt.show()
```

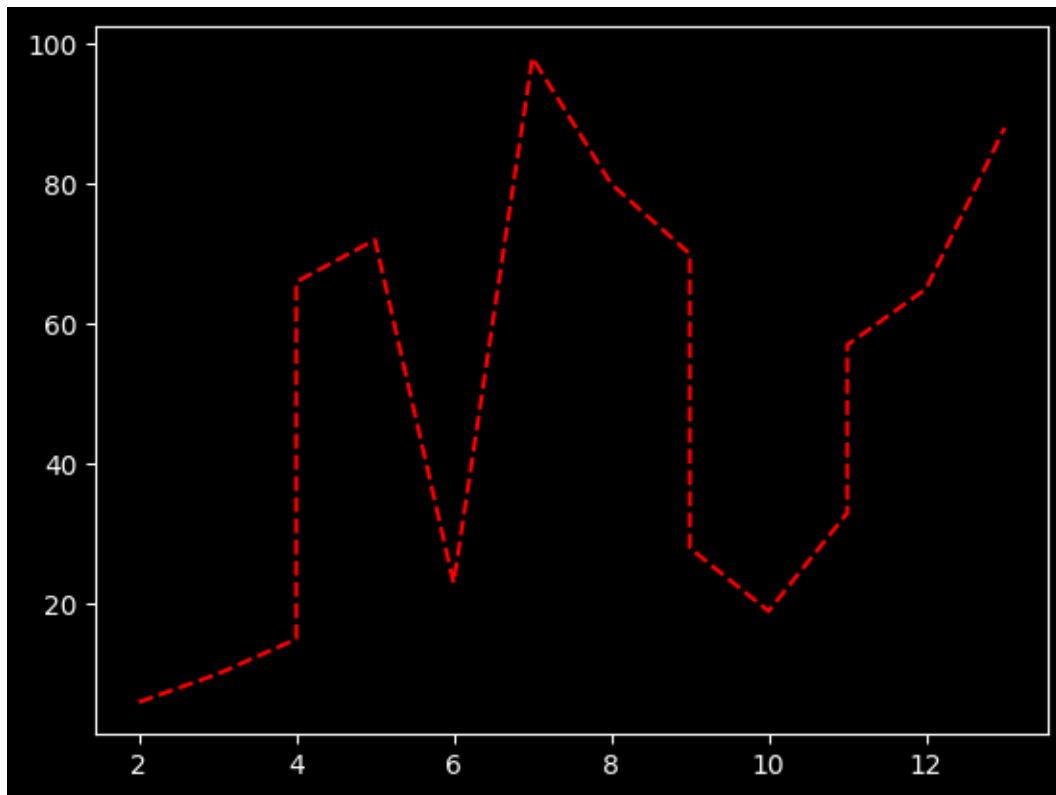


add Codeadd Markdown

[237]:

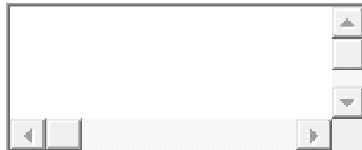


```
plt.plot(study_hours, marks, 'r--')
plt.show()
```



add Codeadd Markdown

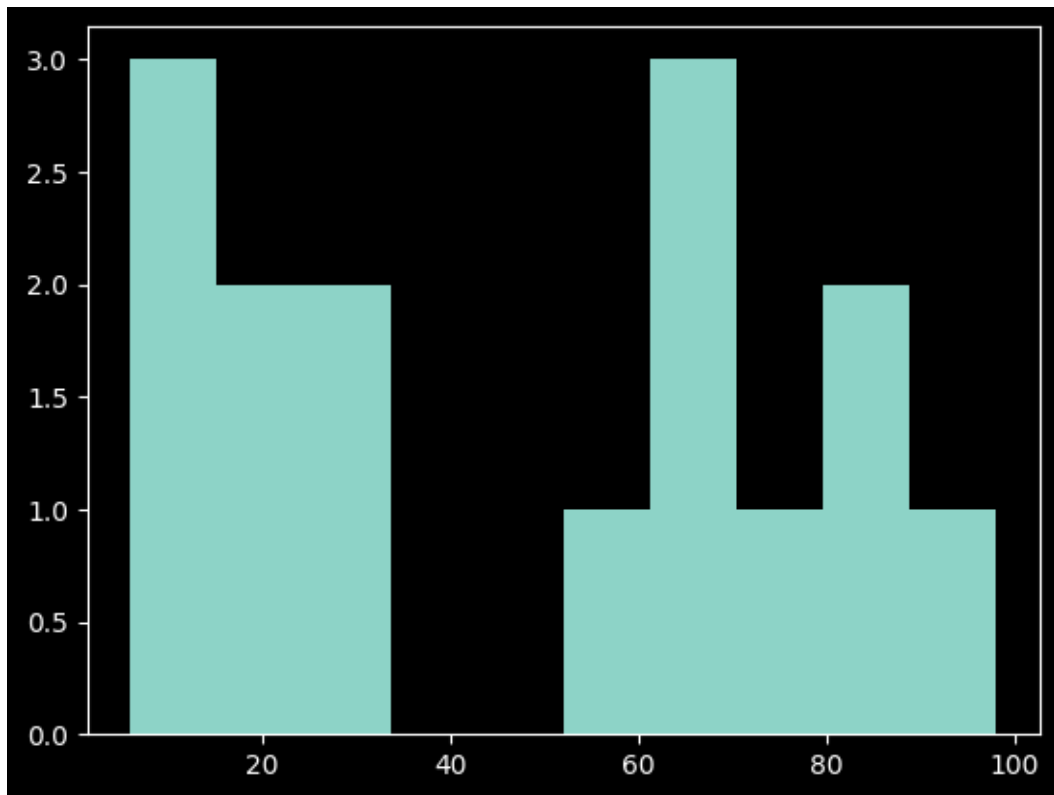
[238]:



plt.hist(marks)

[238]:

```
(array([3, 2, 2, 0, 0, 1, 3, 1, 2, 1]),  
 array([ 6., 15.2, 24.4, 33.6, 42.8, 52., 61.2, 70.4, 79.6, 88.8, 98. ]),  
<BarContainer object of 10 artists>)
```



add Codeadd Markdown

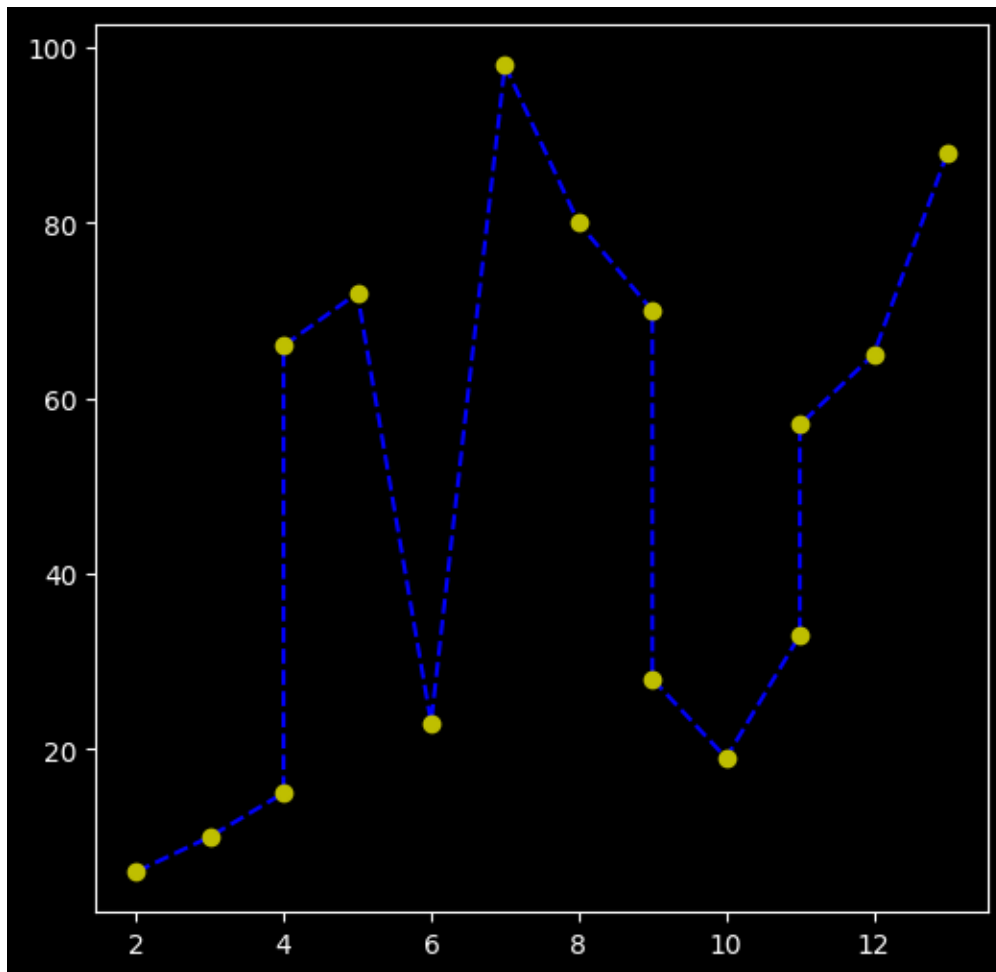
[240]:



```
plt.figure(figsize=(6,6))  
plt.plot(study_hours, marks, 'b--')  
plt.plot(study_hours, marks, 'yo')
```

[240]:

[<matplotlib.lines.Line2D at 0x7c7d6c1e99f0>]



add Codeadd Markdown

[242]:



```
plt.figure(figsize =(6,6))
```

```
plt.subplot(2,2,1)  
plt.scatter(study_hours, marks)
```

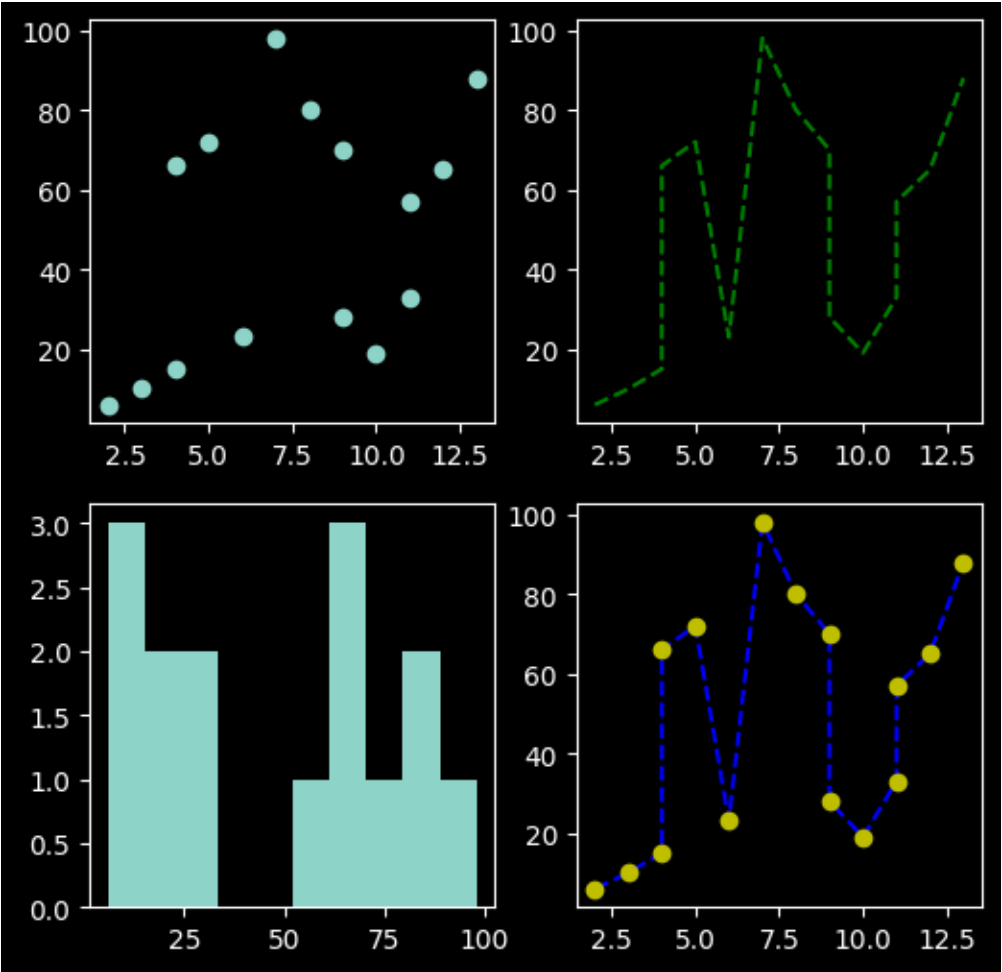
```
plt.subplot(2,2,2)  
plt.plot(study_hours, marks, 'g--')
```

```
plt.subplot(2,2,3)  
plt.hist(marks)
```

```
plt.subplot(2,2,4)  
plt.plot(study_hours, marks, 'b--')  
plt.plot(study_hours, marks, 'yo')
```

```
[<matplotlib.lines.Line2D at 0x7c7d6846a740>]
```

[242]:



add Codeadd Markdown

Showing Images in Matplotlib - Imshow

function****

add Codeadd Markdown



```
import matplotlib.pyplot as plt
import matplotlib.image as mpimg
```

add Codeadd Markdown

[266]:

[267]:



```
from numpy import *  
from matplotlib import *  
add Codeadd Markdown
```

[270]:



```
img = mpimg.imread(r'/kaggle/input/bangalow/image.jpg')  
add Codeadd Markdown
```

[271]:



```
from matplotlib import pyplot as plt  
plt.imshow(img)  
plt.show()
```



add Codeadd Markdown

[274]:



```
img = mpimg.imread(r'/kaggle/input/bangalow2/2017SFdupdXMinej.jpg')
from matplotlib import pyplot as plt
plt.imshow(img)
plt.show()
```

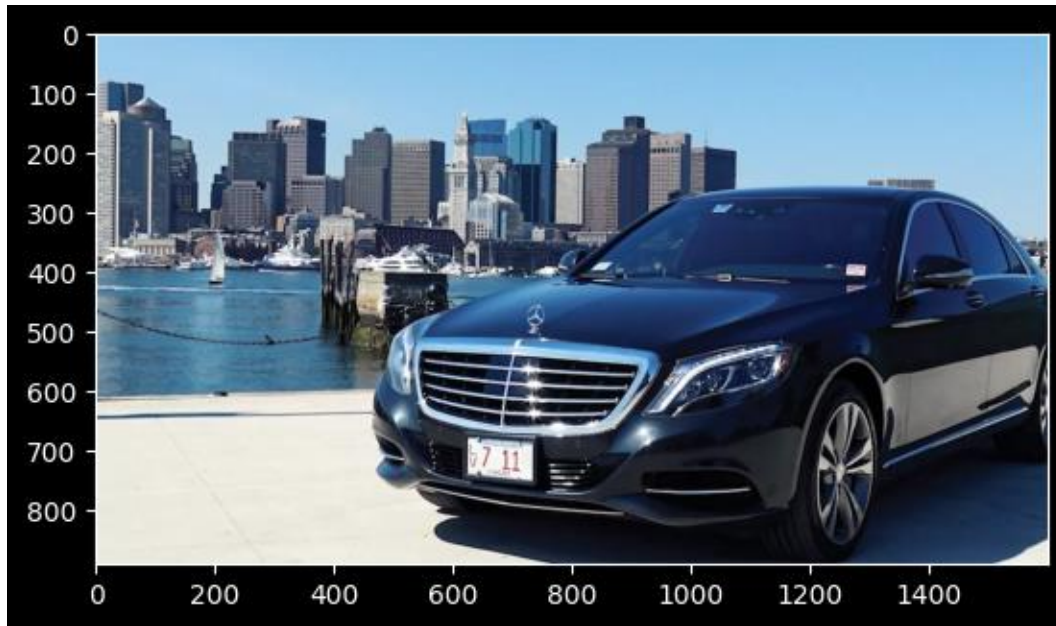


add Codeadd Markdown

[275]:



```
img = mpimg.imread(r'/kaggle/input/mercedessedan/MercedesSedan-Galley-1.webp')
from matplotlib import pyplot as plt
plt.imshow(img)
plt.show()
```



add Codeadd Markdown

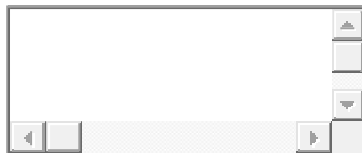
Reading Image using OpenCV****

add Codeadd Markdown



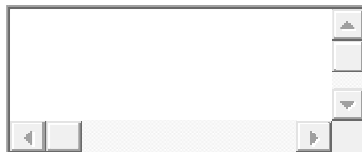
```
import cv2
```

add Codeadd Markdown



```
imgcv2 = cv2.imread('/kaggle/input/homeimage/R (2).jpg')
```

add Codeadd Markdown



```
plt.imshow(imgcv2)  
plt.show()
```

[276]:

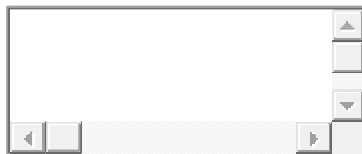
[280]:

[281]:



add Codeadd Markdown

[285]:



```
imgcv2 = cv2.cvtColor(imgcv2, cv2.COLOR_BGR2RGB)
```

add Codeadd Markdown

[287]:



```
plt.imshow(imgcv2)
```

```
plt.show()
```



add Codeadd Markdown

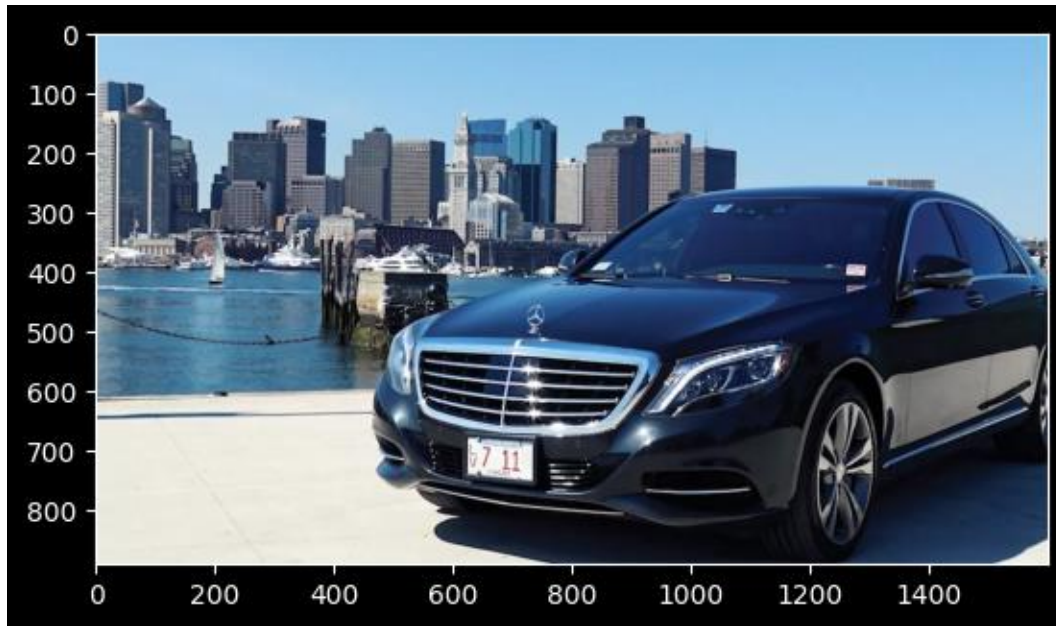
#Changing Aspect****

add Codeadd Markdown



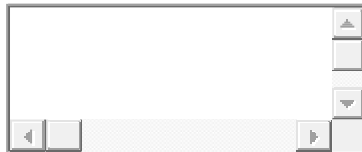
```
plt.imshow(img, aspect = 1)  
plt.show()
```

[291]:



add Codeadd Markdown

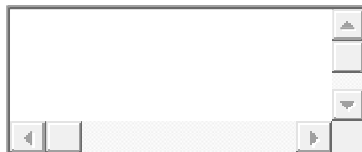
[293]:



```
img1 = mpimg.imread('/kaggle/input/bangalow/image.jpg')
img2 = mpimg.imread('/kaggle/input/bangalow2/2017SFdupdXMinej.jpg')
img3 = mpimg.imread('/kaggle/input/homeimage/R (2).jpg')
img4 = mpimg.imread('/kaggle/input/mercedessedan/MercedesSedan-Galley-1.webp')
```

add Codeadd Markdown

[298]:



```
plt.figure()
```

```
plt.subplot(2,2,1)
plt.imshow(img1)
```

```
plt.figure()
plt.subplot(2,2,2)
plt.imshow(img2)
```

```
plt.figure()
plt.subplot(2,2,3)
plt.imshow(img3)
```

```
plt.figure()
plt.subplot(2,2,4)
plt.imshow(img4)
```

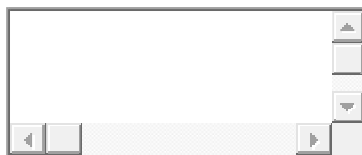
plt.show()



add Codeadd Markdown

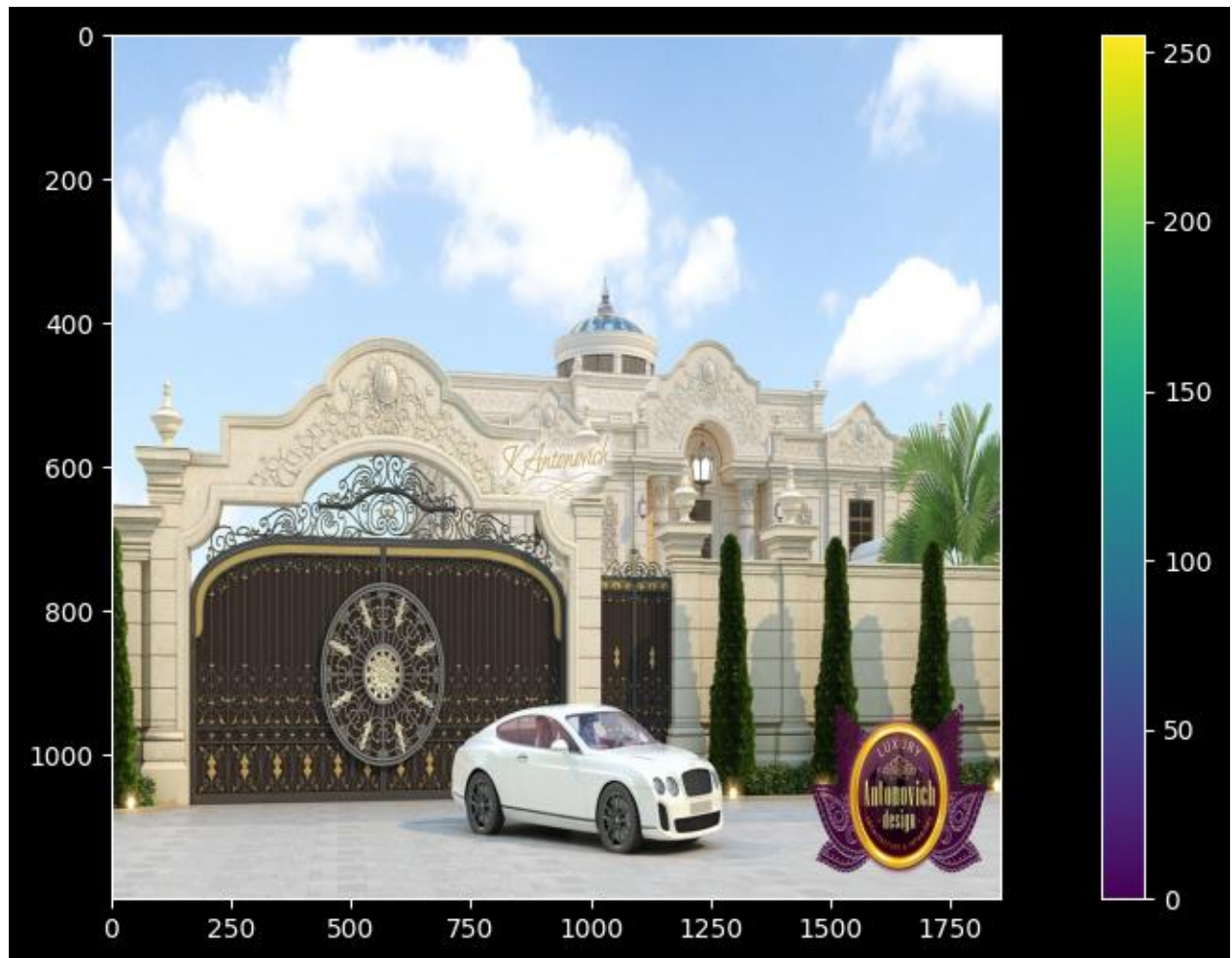
#ColorBar****

add Codeadd Markdown



```
plt.figure(figsize = (14,6))  
plt.imshow(img, aspect = 1.5)  
plt.colorbar()  
plt.show()
```

[315]:



add Codeadd Markdown

[307]:



```
img = mpimg.imread(r'/kaggle/input/bangalow2/2017SFdupdXMinej.jpg')
from matplotlib import pyplot as plt
plt.imshow(img, cmap = 'gray')
plt.colorbar()
plt.show()
```



add Codeadd Markdown

[]:



add Codeadd Markdown