

## Letters we use for colors

- **b** =====> blue
- **g** =====> green
- **r** =====> red
- **y** =====> yellow
- **c** =====> cyan
- **k** =====> black
- **w** =====> white
- **m** =====> magenta

## Visualisation

- matplotlib
  - seaborn
  - plotly
  - folium
- and many more softwares

```
In [2]: 1 import matplotlib.pyplot as plt
        2 ##matplotlib inline
```

```
In [3]: 1 name= ["a","b","c","d"]
        2 marks =[67,88,92,41]
        3 att= [93,67,43,21]
        4 plt.plot(name,marks)
        5 # plt.show()
```

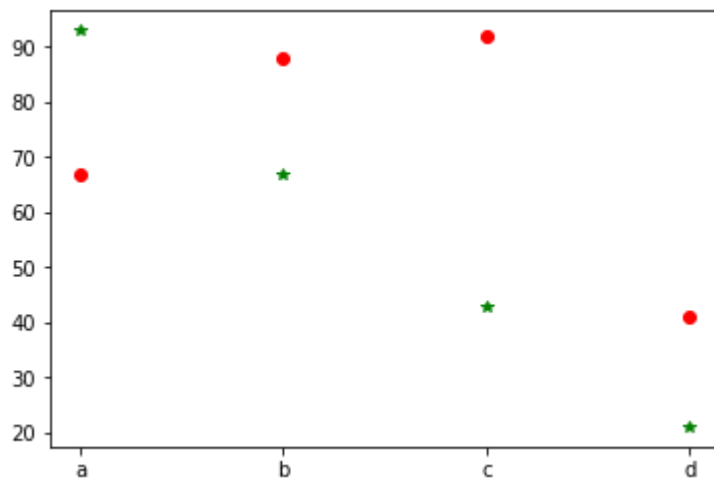
...

```
In [ ]: 1 plt.plot(name,marks,name,att)
        2 plt.title("Student Details")
        3 plt.xlabel("Name")
        4 plt.ylabel("details")
        5 plt.grid()
        6 #plt.show()
```

...

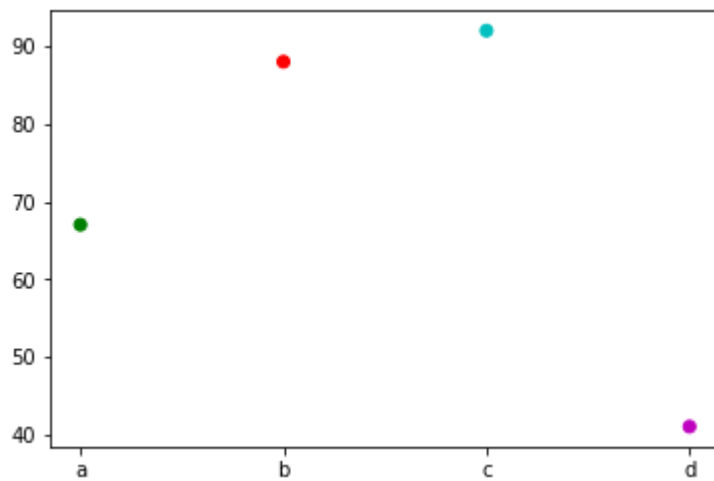
```
In [9]: 1 plt.plot(name,marks,"or",name,att,"*g")
        2
```

```
Out[9]: [<matplotlib.lines.Line2D at 0x42e13b0>,
         <matplotlib.lines.Line2D at 0x4340670>]
```



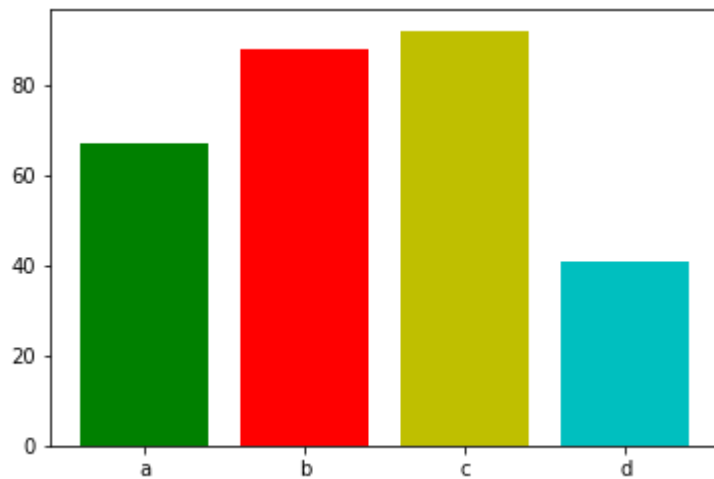
```
In [10]: 1 plt.scatter(name,marks,color="grcm")
```

```
Out[10]: <matplotlib.collections.PathCollection at 0x4370fd0>
```



```
In [ ]: 1 plt.bar(name,marks,color="gryc")
```

Out[6]: <BarContainer object of 4 artists>



```
In [ ]: 1 plt.plot(name,marks,label = "marks")
2 plt.plot(name,att,label = "att")
3 plt.legend()
```

...

```
In [13]: 1 name= ["a","b","c","d"]
2 marks =[67,88,92,41]
3 att= [93,67,43,21]
4 plt.subplot(421)
5 plt.plot(name,marks,"*r")
6 plt.subplot(424)
7 plt.plot(name,att,"ob")
8 plt.subplot(422)
9 plt.plot(marks,att,"--m")
10 plt.subplot(423)
11 plt.plot(name,marks,"-g")
```

...

```
In [15]: 1 import pandas as pd
2 df = pd.read_csv("marks.csv", header = None)
3 df
```

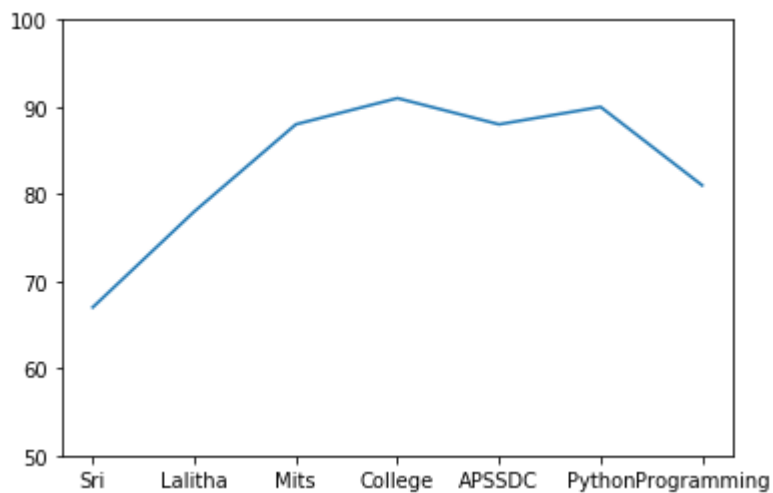
```
Out[15]:
```

	0	1	2	3
0	Sri	67	78.0	99.0
1	Lalitha	78	78.0	NaN
2	Mits	88	71.0	56.0
3	College	91	56.0	78.0
4	APSSDC	88	91.0	56.2
5	Python	90	NaN	65.0
6	Programming	81	76.0	45.0

```
In [16]: 1 name = df.iloc[:,0]
2 marks = df.iloc[:,1]
```

```
In [19]: 1 plt.plot(name,marks)
2 plt.ylim(50,100) # === to change the scale
```

```
Out[19]: (50, 100)
```



```
In [ ]: 1
```

```
In [ ]: 1
```