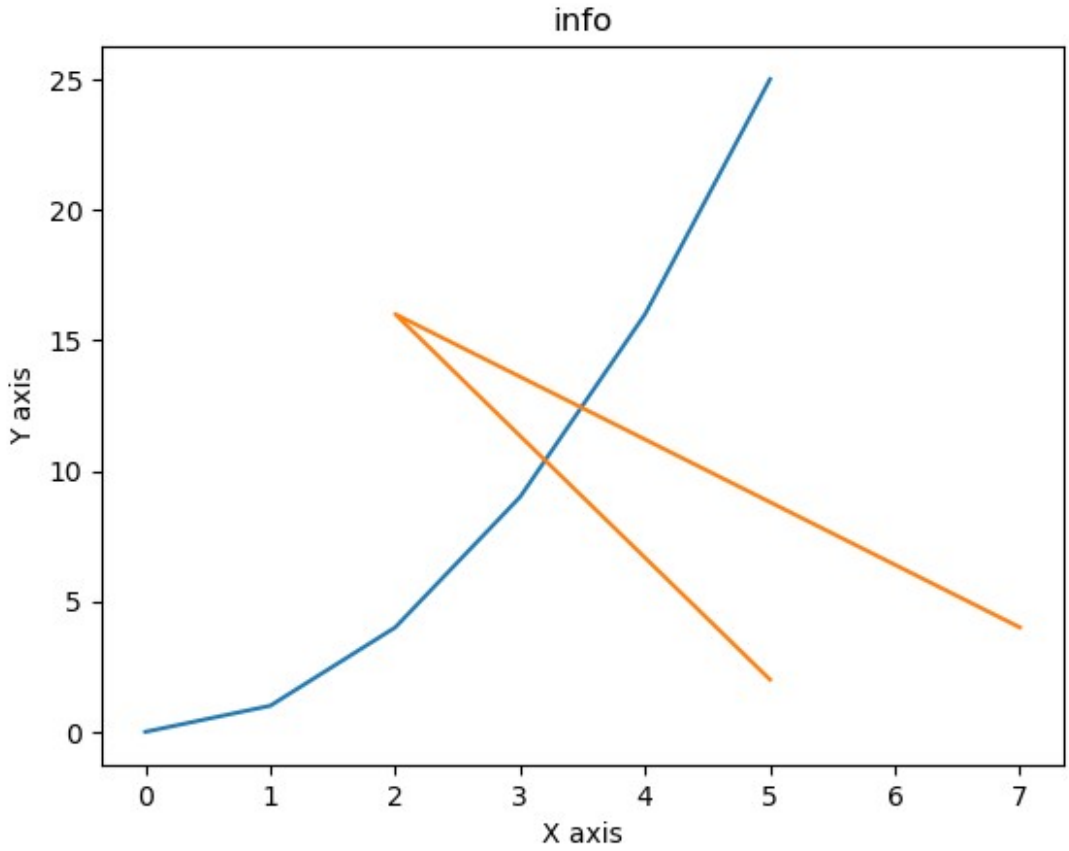
```
import matplotlib.pyplot as plt

x_values=[0,1,2,3,4,5]
squares=[0,1,4,9,16,25]

plt.plot(x_values,squares)
plt.savefig("testimage.jpg")

x=[5,2,7]
y=[2,16,4]
plt.plot(x,y)
plt.title('info')
plt.ylabel('Y axis')
plt.xlabel('X axis')
plt.show()
```

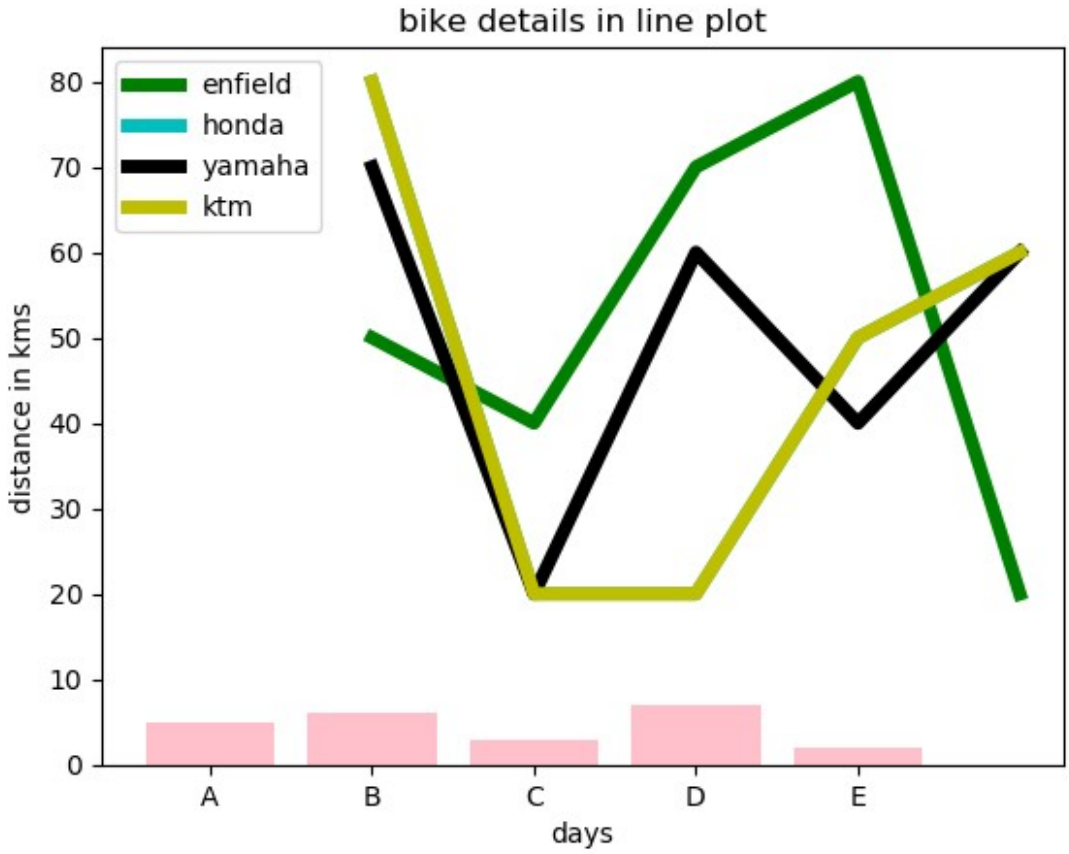



```
x=[1,2,3,4,5]
y=[50,40,70,80,20]
y2=[80,20,20,50,60]
y3=[70,20,60,40,60]
y4=[80,20,20,50,60]

plt.plot(x,y,'g',label='enfield',linewidth=5)
plt.plot(x,y2,'c',label='honda',linewidth=5)
```

```
plt.plot(x,y3,'k',label='yamaha',linewidth=5)
plt.plot(x,y4,'y',label='ktm',linewidth=5)
plt.title('bike details in line plot')
plt.ylabel("distance in kms")
plt.xlabel('days')
plt.legend()
```

```
<matplotlib.legend.Legend at 0x7f115eead390>
```

```
x_values=[5,6,3,7,2]
y_values=["A","B","C","D","E"]
plt.bar(y_values,x_values,color="pink")
plt.show()
```

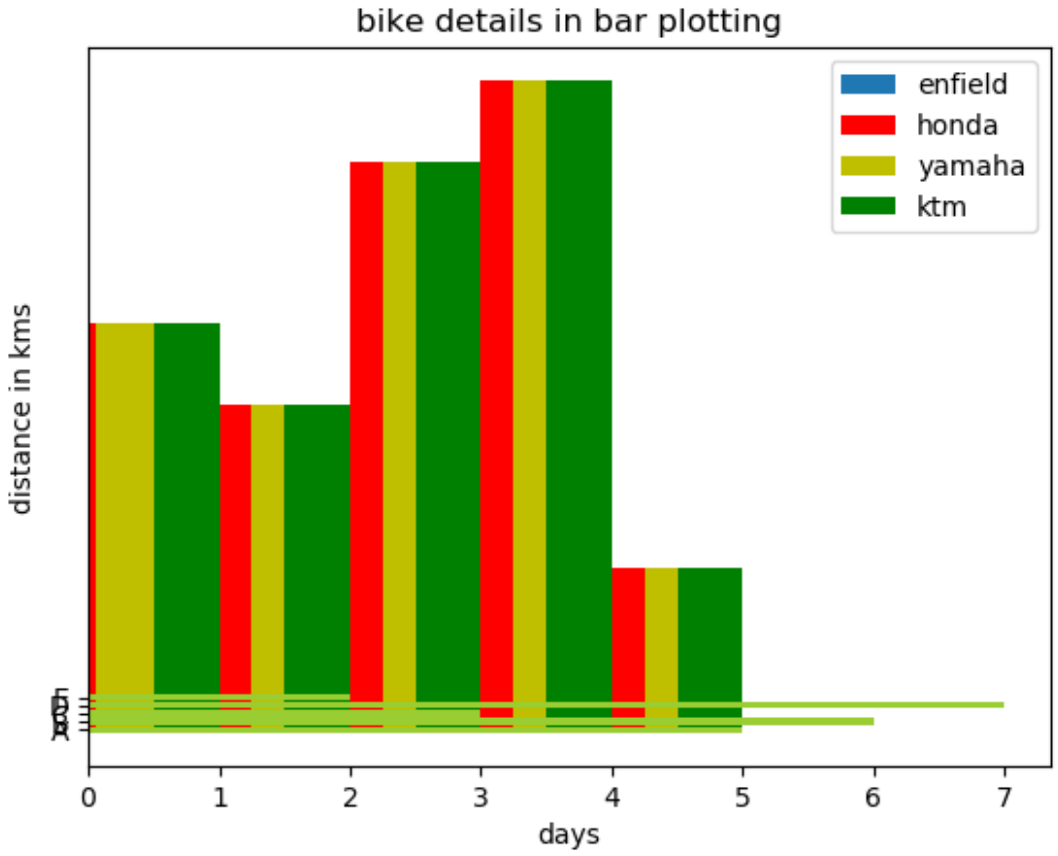



```
plt.bar([0.25,1.25,2.25,3.25,4.25],
[50,40,70,80,20],label="enfield",width=0.5)
plt.bar([0.26,1.25,2.25,3.25,4.25],
[50,40,70,80,20],label="honda",color='r',width=0.5)
plt.bar([0.31,1.5,2.5,3.5,4.5],
[50,40,70,80,20],label="yamaha",color='y',width=0.5)
plt.bar([0.75,1.75,2.75,3.75,4.75],
[50,40,70,80,20],label="ktm",color='g',width=0.5)

plt.legend()
```

```
plt.xlabel('days')
plt.ylabel('distance in kms')
plt.title('bike details in bar plotting')
```

```
Text(0.5, 1.0, 'bike details in bar plotting')
```

```
x_values=[5,6,3,7,2]
y_val=["A","B","C","D","E"]
plt.barh(y_val,x_values,color="yellowgreen")
plt.show()
```

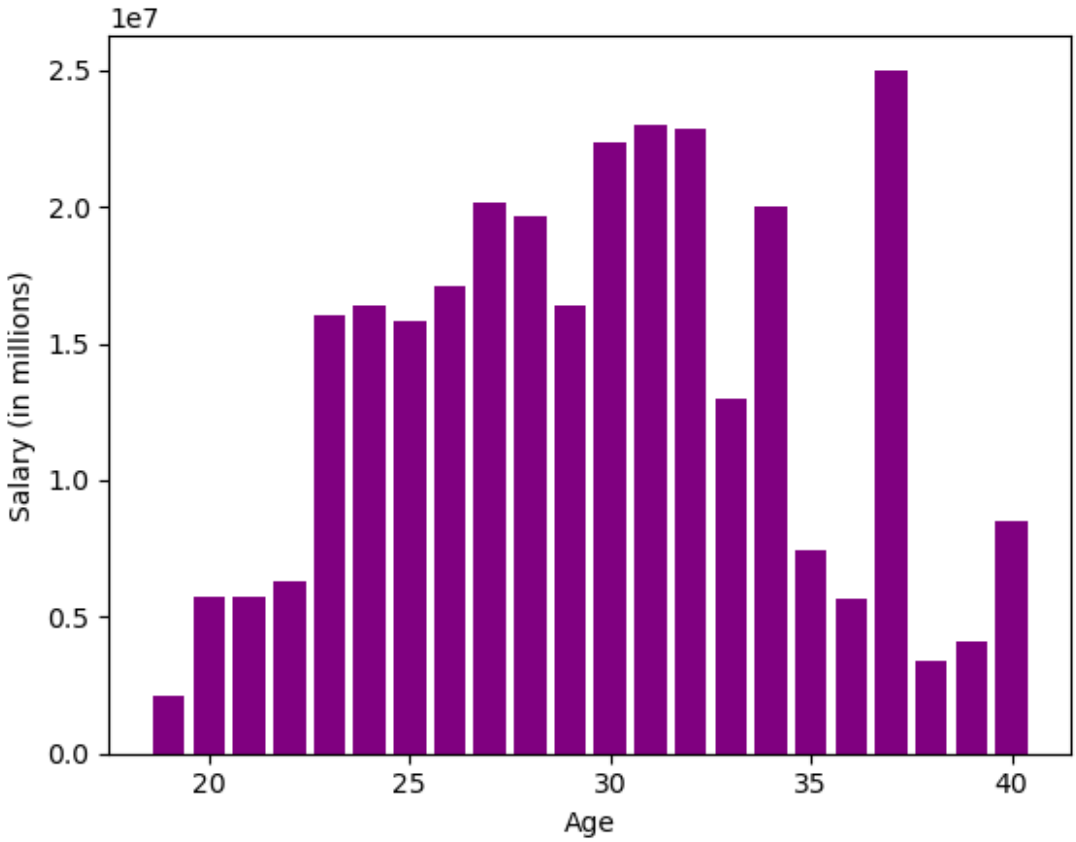



```
import pandas as pd
import matplotlib.pyplot as plt
df = pd.read_csv('nba.csv')
print(df)
```

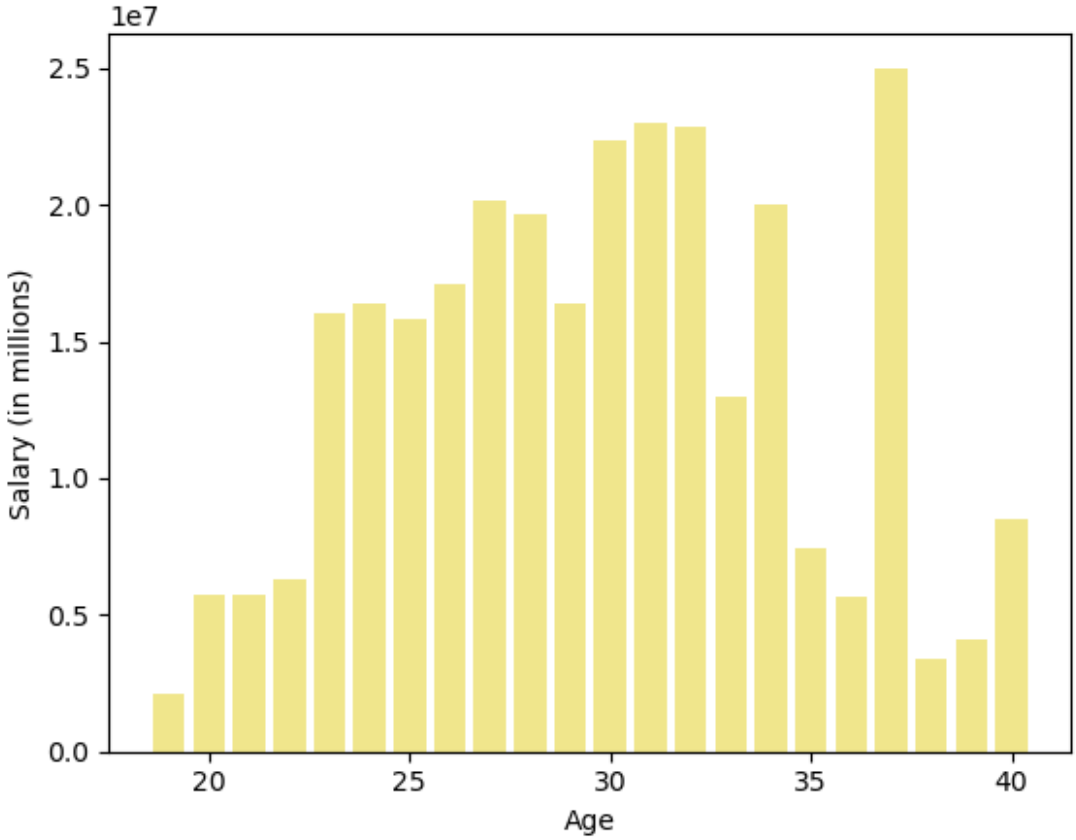
```
                Name            Team  Number Position   Age Height
Weight  \
0    Avery Bradley  Boston Celtics     0.0       PG  25.0    6-2
180.0
1      Jae Crowder  Boston Celtics    99.0       SF  25.0    6-6
235.0
2     John Holland  Boston Celtics    30.0       SG  27.0    6-5
205.0
3      R.J. Hunter  Boston Celtics    28.0       SG  22.0    6-5
```

```
185.0
4    Jonas Jerebko  Boston Celtics     8.0       PF  29.0   6-10
231.0
..             ...             ...     ...      ...   ...    ...     .
..
453   Shelvin Mack       Utah Jazz     8.0       PG  26.0    6-3
203.0
454      Raul Neto       Utah Jazz    25.0       PG  24.0    6-1
179.0
455   Tibor Pleiss       Utah Jazz    21.0        C  26.0    7-3
256.0
456    Jeff Withey       Utah Jazz    24.0        C  26.0    7-0
231.0
457            NaN             NaN     NaN      NaN   NaN    NaN
NaN

               College     Salary
0                Texas  7730337.0
1            Marquette  6796117.0
2    Boston University        NaN
3        Georgia State  1148640.0
4                  NaN  5000000.0
..                 ...        ...
453             Butler  2433333.0
454                NaN   900000.0
455                NaN  2900000.0
456             Kansas   947276.0
457                NaN        NaN

[458 rows x 9 columns]
```

```
y_values = df['Salary']
x_values = df['Age']
plt.xlabel('Age')
plt.ylabel('Salary (in millions)')
#To plot a bar graph plt.bar() command is used
#This plots a bar graph between Age and Salaries of NBA players
plt.bar(x_values,y_values,color = "purple")
plt.show()
```




```
y_values = df['Salary']
x_values = df['Age']
plt.xlabel('Age')
plt.ylabel('Salary (in millions)')
# Making changes in the color field changes the colour of the graph
plt.bar(x_values,y_values,color = "khaki")
plt.show()
```


1e7
2.5
2.0
1.5
1.0
0.5
0.0
Salary (in millions)
20
25
30
35
40
Age