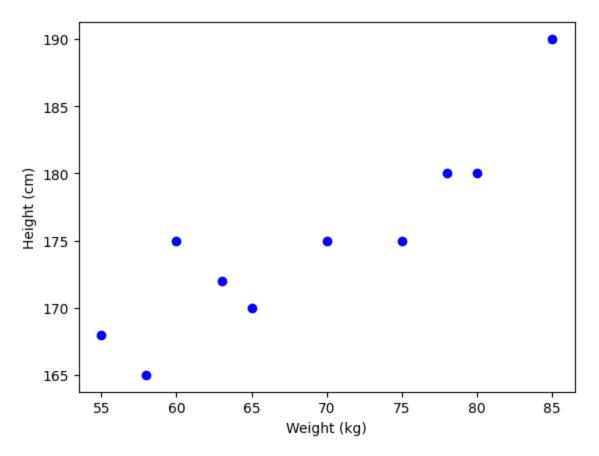
1. Import the necessary libraries (Matplotlib and Seaborn) and load the data from the provided CSV file into a Pandas DataFrame.

```
In [8]:
          import pandas as pd
           import numpy as np
           import matplotlib.pyplot as plt
           import seaborn as sns
 In [9]: df=pd.read_csv('padas_question.csv')
In [10]:
                      Gender Age Height (cm) Weight (kg)
Out[10]:
              Name
                                                                    City
                      Female
                                25
                                            165
                                                         58
                                                               New York
                Alice
           1
                Bob
                                30
                        Male
                                            180
                                                         80
                                                             Los Angeles
           2 Charlie
                        Male
                                35
                                            175
                                                         70
                                                                Chicago
           3
               Diana
                      Female
                                28
                                            170
                                                         65
                                                                  Miami
                 Eva
                      Female
                                27
                                           175
                                                         60
                                                               New York
           5
                                           190
               Frank
                        Male
                                40
                                                         85
                                                                Houston
                     Female
                                32
                                           168
                                                         55
               Grace
                                                                Chicago
           7
              Henry
                        Male
                                45
                                           175
                                                         75
                                                             Los Angeles
           8
                                26
                                           172
                      Female
                                                         63
                                                                  Miami
                 lvy
           9
                Jack
                        Male
                                28
                                           180
                                                         78
                                                               New York
```

2. Create a scatter plot using Matplotlib to visualize the relationship between height and weight in the dataset. Label the axes and give the plot a title.

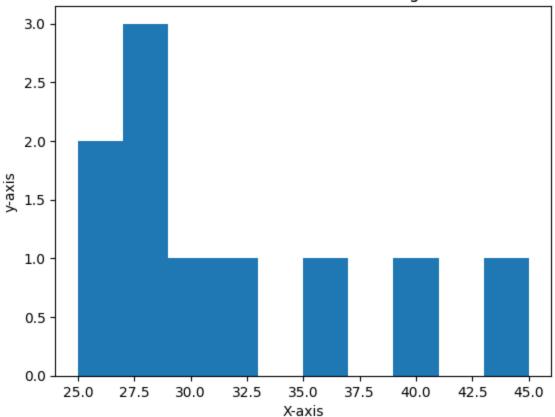
```
In [11]: plt.scatter(df['Weight (kg)'],df['Height (cm)'],c="blue")
    plt.ylabel('Height (cm)')
    plt.xlabel('Weight (kg)')
    plt.show()
```



3. Create a histogram using Matplotlib to visualize the distribution of ages in the dataset. Label the axes and give the plot a title.

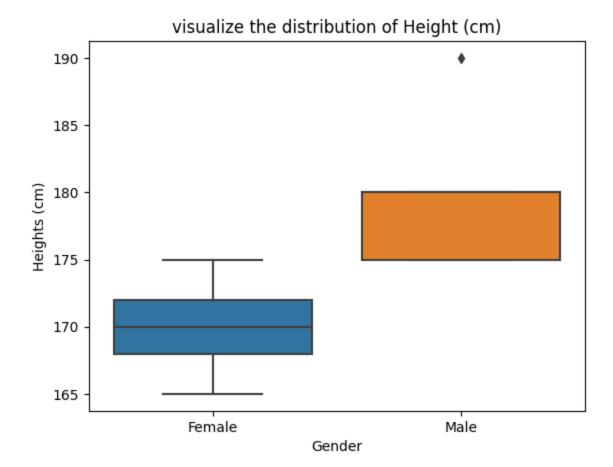
```
In [42]: plt.hist(df['Age'],bins=None)
   plt.xlabel("X-axis")
   plt.ylabel("y-axis")
   plt.title('visualize the distribution of ages')
   plt.show()
```

## visualize the distribution of ages



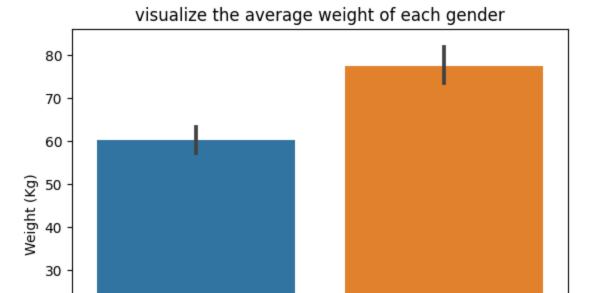
4. Create a box plot using Seaborn to visualize the distribution of heights in the dataset by gender. Label the axes and give the plot a title.

```
In [41]: sns.boxplot(data = df,x='Gender',y='Height (cm)')
   plt.xlabel("Gender")
   plt.ylabel("Heights (cm)")
   plt.title('visualize the distribution of Height (cm)')
   plt.show()
```



## 5. Create a bar chart using Seaborn to visualize the average weight of each gender in the dataset. Label the axes and give the plot a title

```
In [53]: sns.barplot(data=df,x='Gender',y='Weight (kg)')
    plt.ylabel("Weight (Kg)")
    plt.xlabel("Gender")
    plt.title('visualize the average weight of each gender')
    plt.show()
```





Gender

Female

Male

20

10

0