```
import pandas as pd

# Load the dataset
df = pd.read_csv('faces.csv')
print(df)
```

```
         image_name  width  height   x0   y0    x1   y1
0     00001722.jpg   1333    2000  490  320   687  664
1     00001044.jpg   2000    1333  791  119  1200  436
2     00001050.jpg    667    1000  304  155   407  331
3     00001736.jpg    626     417  147   14   519  303
4     00003121.jpg    626     418  462   60   599  166
...            ...    ...     ...  ...  ...   ...  ...
3345  00002232.jpg    620     349    4   36   186  158
3346  00002232.jpg    620     349  122  103   344  248
3347  00002232.jpg    620     349  258  118   541  303
3348  00002232.jpg    620     349  215   11   362  108
3349  00002232.jpg    620     349  330    1   487   81

[3350 rows x 7 columns]
```

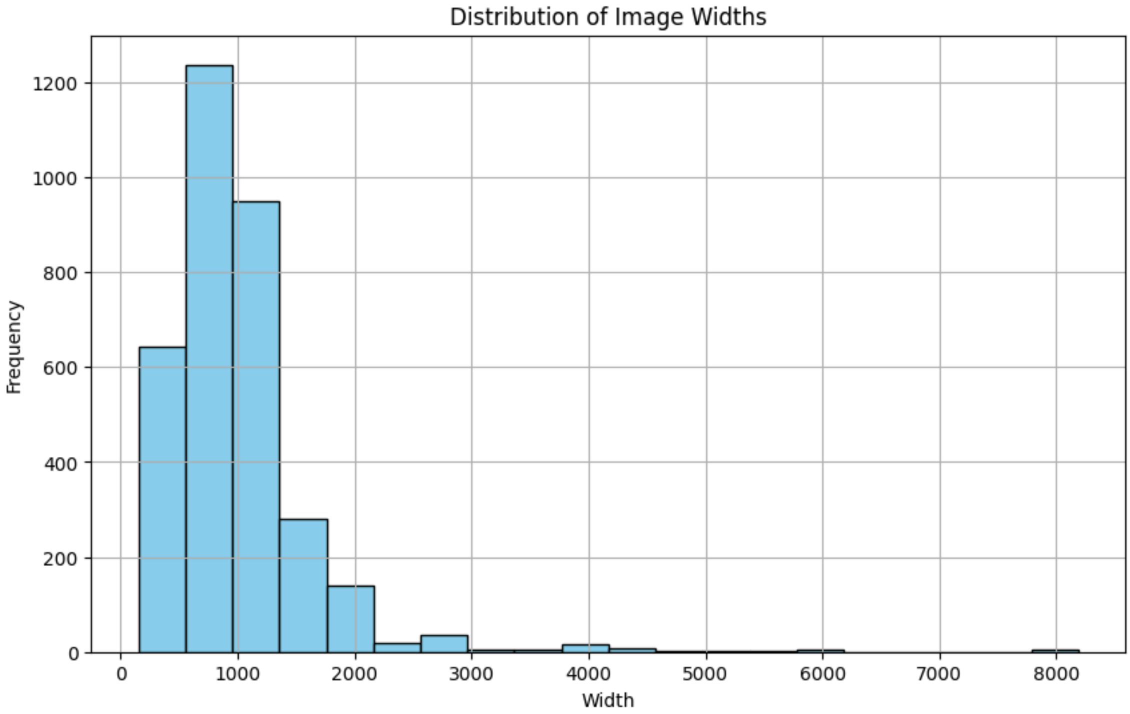
```
# Filter the dataset based on the width
width_626_images = dataset[dataset['width'] == 626]

# Count the number of images with a width of 626
num_width_626_images = len(width_626_images)

print("Number of images with a width of 626:", num_width_626_images)
```

```
Number of images with a width of 626: 89
```

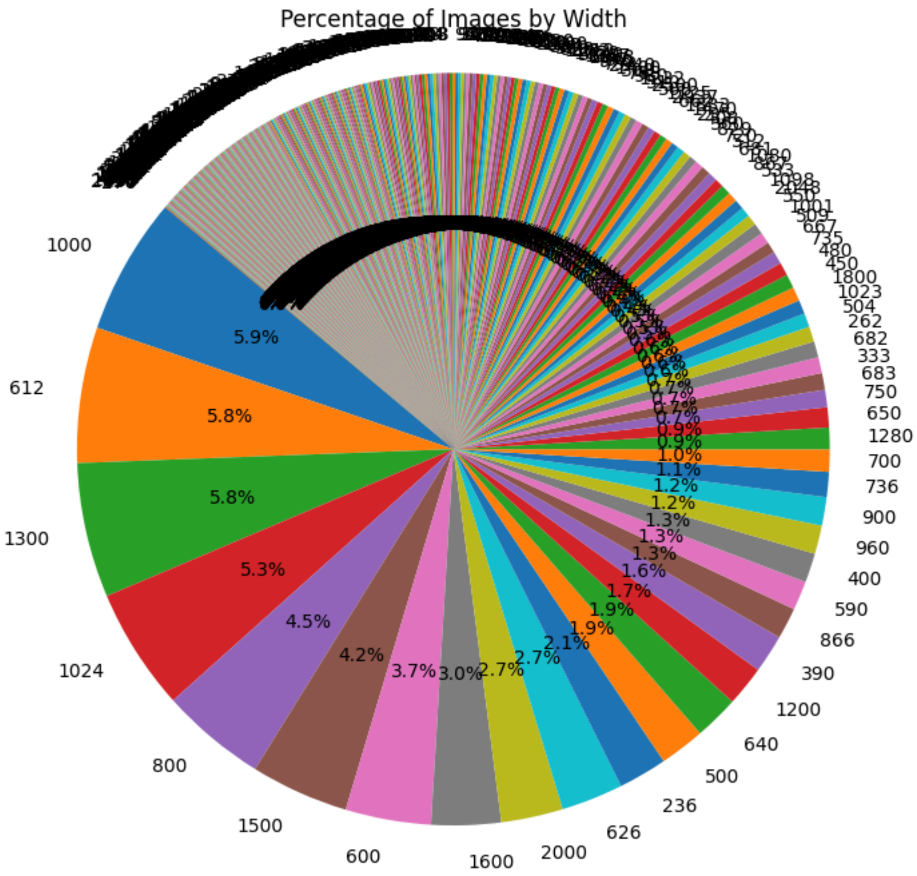
```
# Calculate the average width of the images in the dataset
average_width = dataset['width'].mean()

print("Average width of the images:", average_width)
```

```
Average width of the images: 967.9671641791044
```

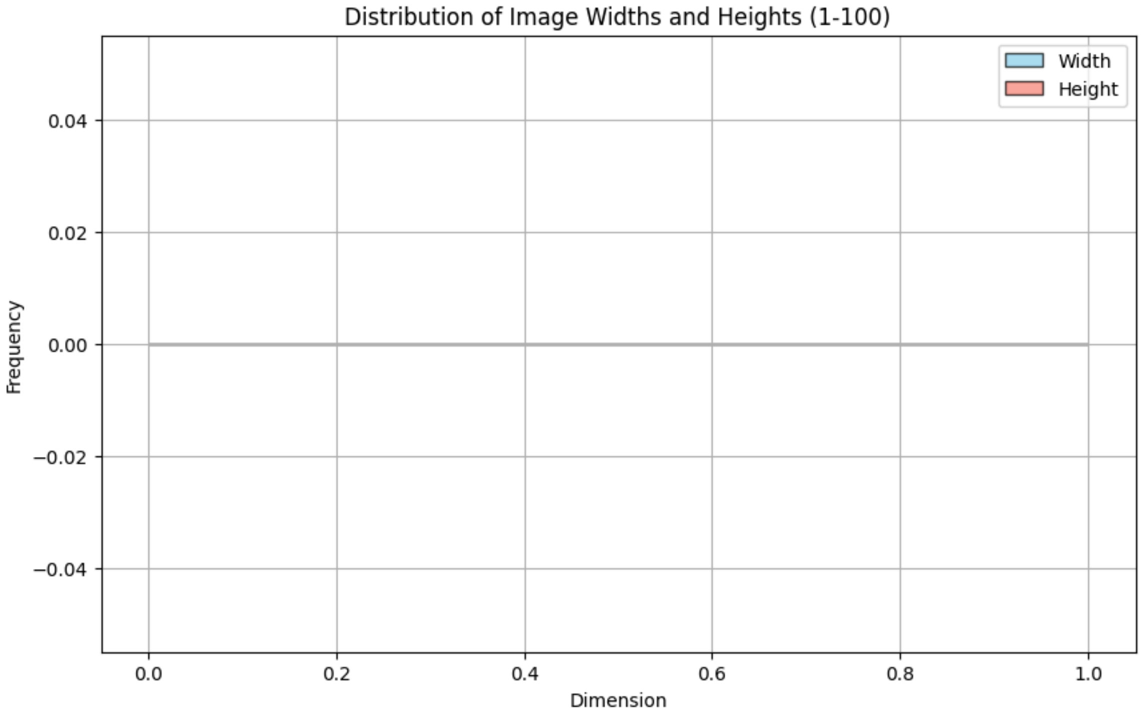
```
import pandas as pd
import matplotlib.pyplot as plt

# Load the dataset
dataset_path = 'faces.csv'  # Replace 'faces.csv' with the path to your dataset
dataset = pd.read_csv(dataset_path)

# Create a figure and axis object
fig, ax = plt.subplots(figsize=(10, 6))

# Plot the histogram
ax.hist(dataset['width'], bins=20, color='skyblue', edgecolor='black')

# Add title and labels
ax.set_title('Distribution of Image Widths')
ax.set_xlabel('Width')
ax.set_ylabel('Frequency')

# Add grid lines
ax.grid(True)

# Save the plot as an image file
plt.savefig('histogram_widths.png')

# Show the plot
plt.show()
```



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

# Load the dataset
dataset_path = 'faces.csv'  # Replace 'faces.csv' with the path to your dataset
dataset = pd.read_csv(dataset_path)

# Calculate the count of unique image widths
width_counts = dataset['width'].value_counts()

# Create a figure and axis object
fig, ax = plt.subplots(figsize=(8, 8))

# Plot the pie chart
ax.pie(width_counts, labels=width_counts.index, autopct='%1.1f%%', startangle=140)

# Add title
ax.set_title('Percentage of Images by Width')

# Equal aspect ratio ensures that pie is drawn as a circle
ax.axis('equal')

# Save the plot as an image file
plt.savefig('pie_chart_widths.png')

# Show the plot
plt.show()
```



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

# Load the dataset
dataset_path = 'faces.csv'  # Replace 'faces.csv' with the path to your dataset
dataset = pd.read_csv(dataset_path)

# Filter the dataset to include only images with width and height between 1 and 100
filtered_dataset = dataset[(dataset['width'] >= 1) & (dataset['width'] <= 100) &
                           (dataset['height'] >= 1) & (dataset['height'] <= 100)]

# Create a figure and axis object
fig, ax = plt.subplots(figsize=(10, 6))

# Plot the histogram for width
ax.hist(filtered_dataset['width'], bins=20, color='skyblue', edgecolor='black', alpha=0.7, label='Width')

# Plot the histogram for height
ax.hist(filtered_dataset['height'], bins=20, color='salmon', edgecolor='black', alpha=0.7, label='Height')

# Add title and labels
ax.set_title('Distribution of Image Widths and Heights (1-100)')
ax.set_xlabel('Dimension')
ax.set_ylabel('Frequency')

# Add legend
ax.legend()

# Add grid lines
ax.grid(True)

# Show the plot
plt.show()
```



```
# Filter the dataset based on the width range
filtered_dataset = dataset[(dataset['width'] >= 500) & (dataset['width'] <= 1000)]

# Count the number of images with a width between 500 and 1000
num_images_width_500_to_1000 = len(filtered_dataset)

print("Number of images with a width between 500 and 1000:", num_images_width_500_to_1000)
```

```
     Number of images with a width between 500 and 1000: 1691
```

```
# Filter the dataset based on the height range
filtered_dataset = dataset[(dataset['height'] >= 500) & (dataset['height'] <= 1000)]

# Count the number of images with a height between 500 and 1000
num_images_height_500_to_1000 = len(filtered_dataset)

print("Number of images with a height between 500 and 1000:", num_images_height_500_to_1000)
```

```
     Number of images with a height between 500 and 1000: 1441
```

```
# Filter the dataset based on the height range
filtered_dataset = dataset[(dataset['height'] >= 500) & (dataset['height'] <= 10000)]

# Count the number of images with a height between 500 and 10000
num_images_height_500_to_10000 = len(filtered_dataset)

print("Number of images with a height between 500 and 10000:", num_images_height_500_to_10000)
```

```
     Number of images with a height between 500 and 10000: 2330
```

```
# Filter the dataset based on the height range
filtered_dataset = dataset[(dataset['height'] >= 5000) & (dataset['height'] <= 10000)]

# Count the number of images with a height between 5000 and 10000
num_images_height_5000_to_10000 = len(filtered_dataset)

print("Number of images with a height between 5000 and 10000:", num_images_height_5000_to_10000)
```

```
     Number of images with a height between 5000 and 10000: 17
```