

# Data Visualization

```
In [1]: #Name : Samruddhi N Sakharkar  
#Roll no.  
#Section :3C  
#Date : 18/08/2024
```

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In [2]: #Aim : Perform Operation on Data Visualization
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In [3]: #importing the basic library  
import numpy as np  
from matplotlib import pyplot as plt
```

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In [4]: x=np.arange(1,11)
```

```
In [5]: x
```

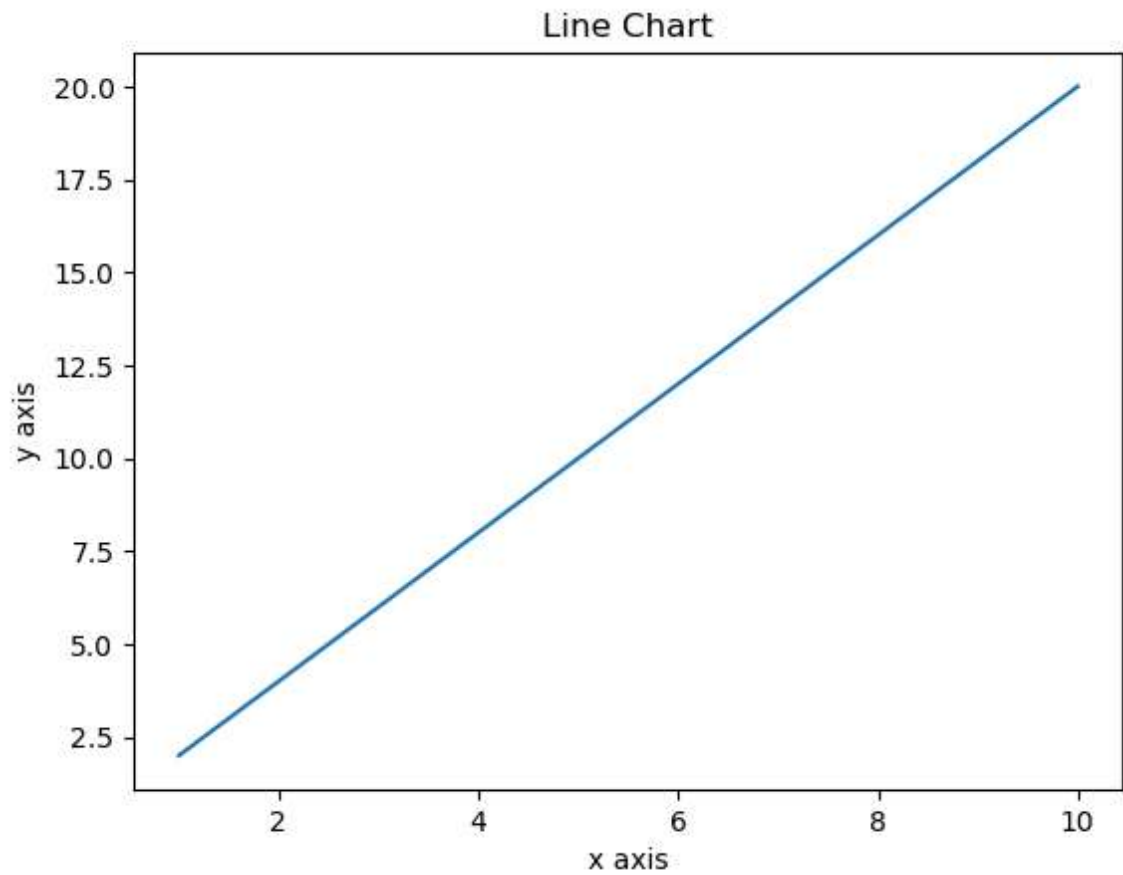
```
Out[5]: array([ 1,  2,  3,  4,  5,  6,  7,  8,  9, 10])
```

```
In [6]: y=2*x
```

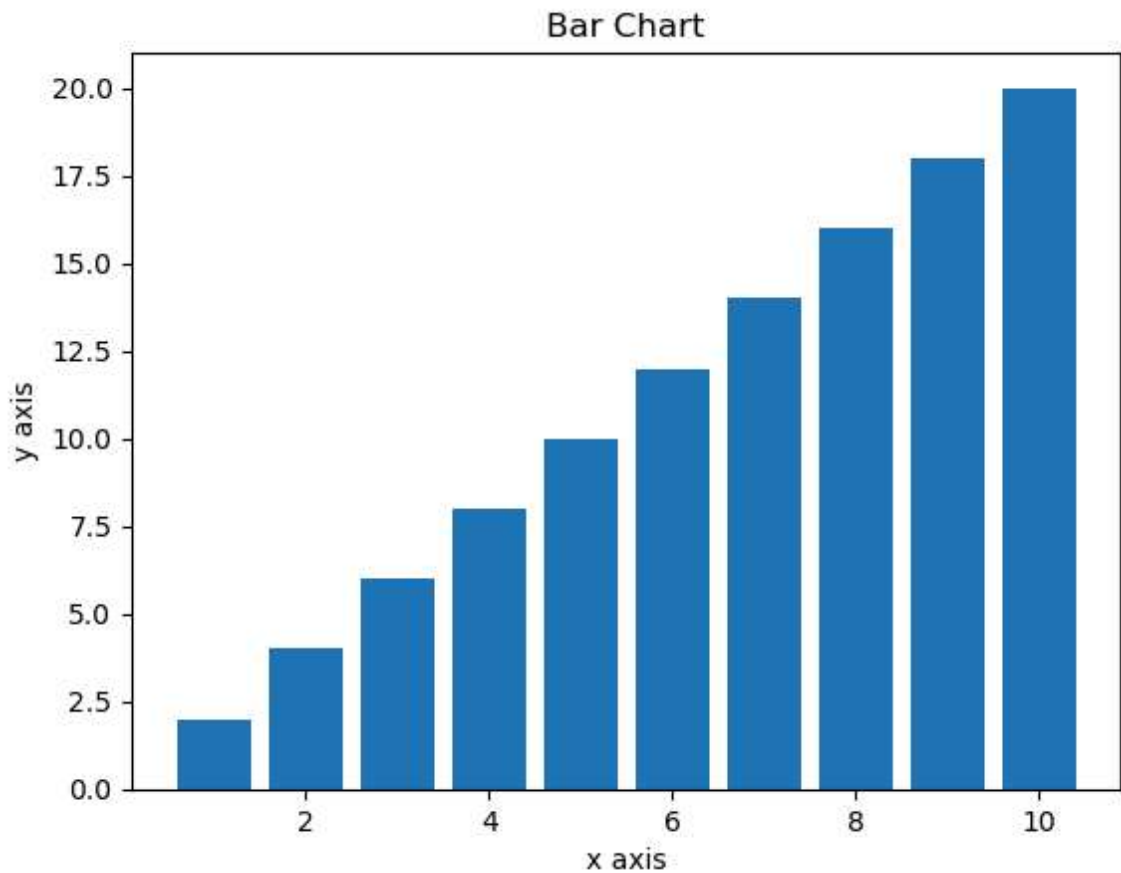
```
In [7]: y
```

```
Out[7]: array([ 2,  4,  6,  8, 10, 12, 14, 16, 18, 20])
```

```
In [8]: plt.plot(x,y)
plt.title("Line Chart")
plt.xlabel("x axis")
plt.ylabel("y axis")
plt.show()
```



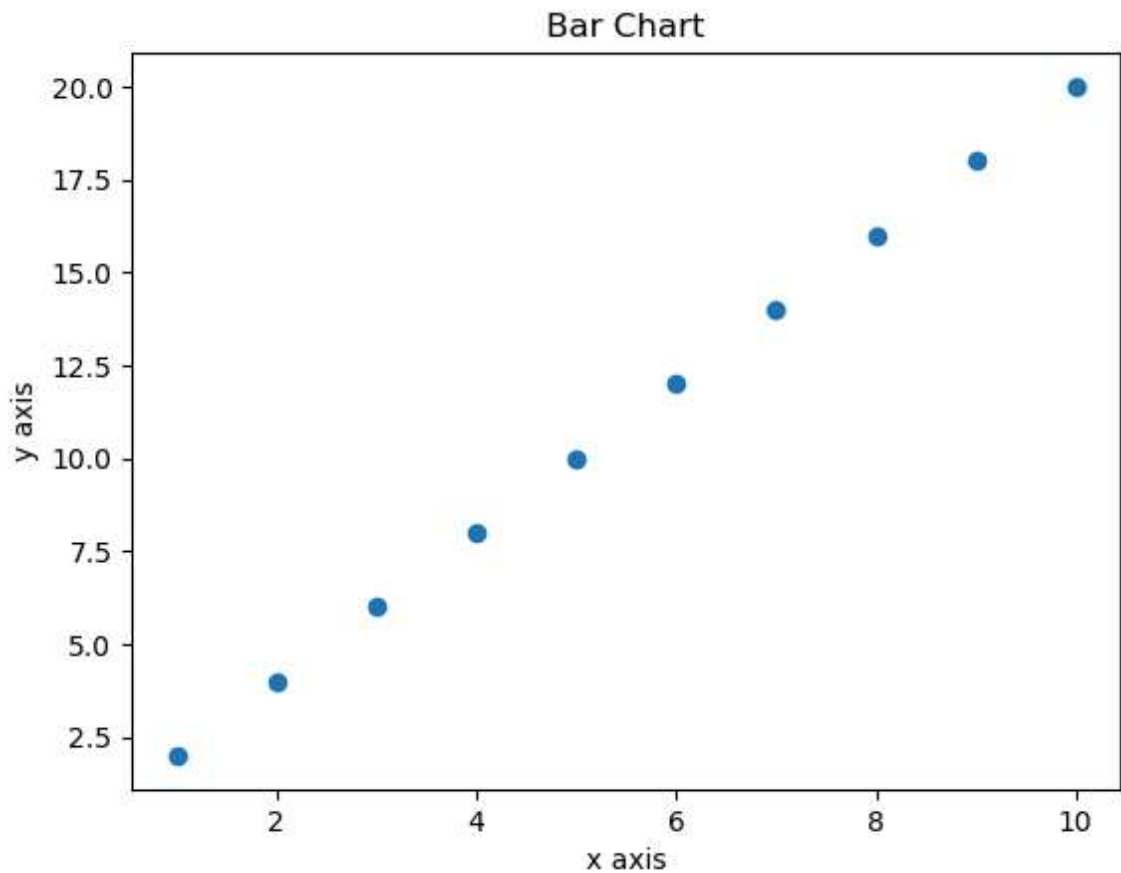
```
In [9]: plt.bar(x,y)
plt.title("Bar Chart")
plt.xlabel("x axis")
plt.ylabel("y axis")
plt.show()
```



```
In [ ]:
```

## Scatter Plot

```
In [10]: plt.scatter(x,y)
plt.title("Bar Chart")
plt.xlabel("x axis")
plt.ylabel("y axis")
plt.show()
```

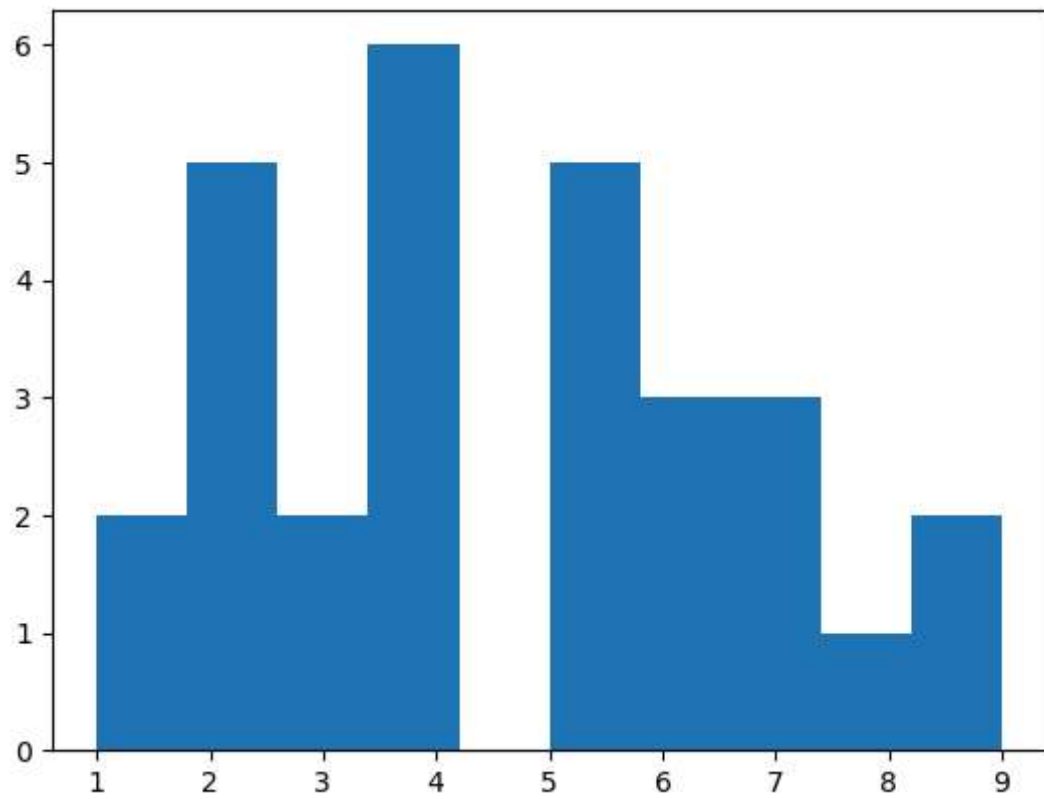


In [ ]:

## Histogram

```
In [11]: H=[1,2,1,2,2,2,3,4,5,5,5,6,5,4,7,7,8,9,4,4,6,7,2,9,6,3,5,4,4]
```

```
In [12]: plt.hist(H)  
plt.show()
```



```
In [ ]:
```