DATA VISUALISATION USING MATPLOTLIB

In [19]:
```
#Aim: To Perform Data Visualisation
#Exp no:7
#Name: Shrutika Vijay Ambekar
#Sec:B
#Roll no:01
#Sub:ET-1
#Date:06/09/2024
```

In [21]:
```
l=[10,23.4,"Shrutika",True]
```

In [23]:
```
type(l)
```

Out[23]:
```
list
```

In [25]:
```
l[0]
```

Out[25]:
```
10
```

In [27]:
```
import numpy as np
```

In [29]:
```
x=np.arange(1,11)
```

In [31]:
```
x
```

Out[31]:
```
array([ 1,  2,  3,  4,  5,  6,  7,  8,  9, 10])
```

In [33]:
```
x=np.arange(1,11,2)
```

In [35]:
```
x
```

Out[35]:
```
array([1, 3, 5, 7, 9])
```

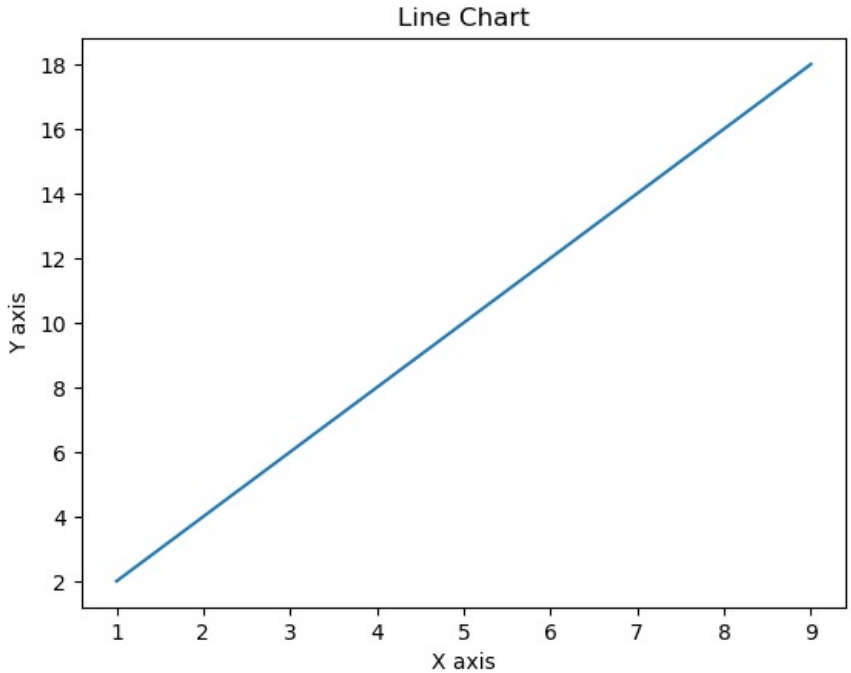
In [37]:
```
y=x*2
```

In [39]:
```
y
```

Out[39]:
```
array([ 2,  6, 10, 14, 18])
```

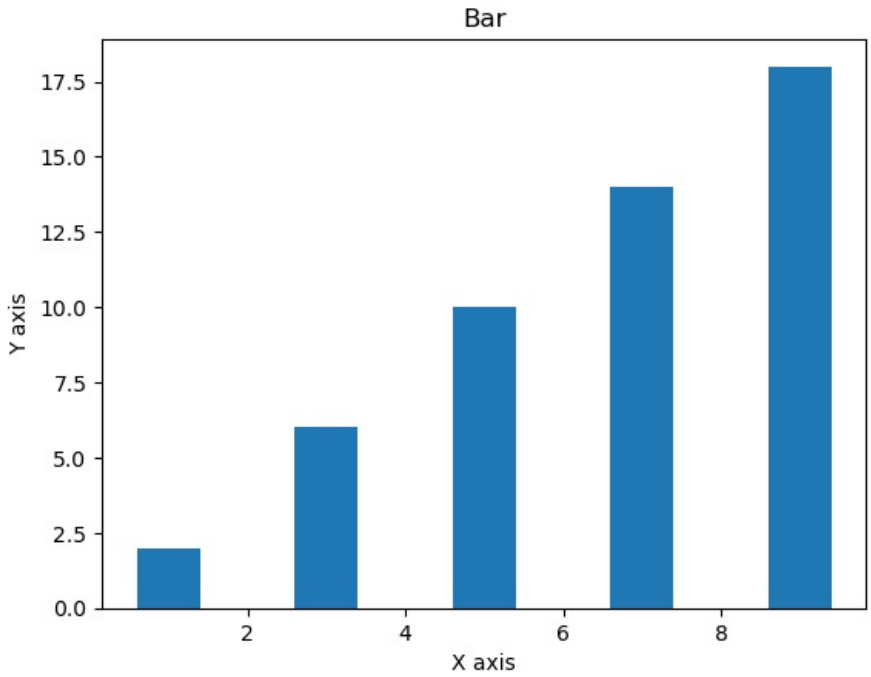
In [41]:
```
from matplotlib import pyplot as plt
```

In [42]:
```
plt.plot(x,y)
plt.title("Line Chart")
plt.xlabel("X axis")
plt.ylabel("Y axis")
plt.show()
```

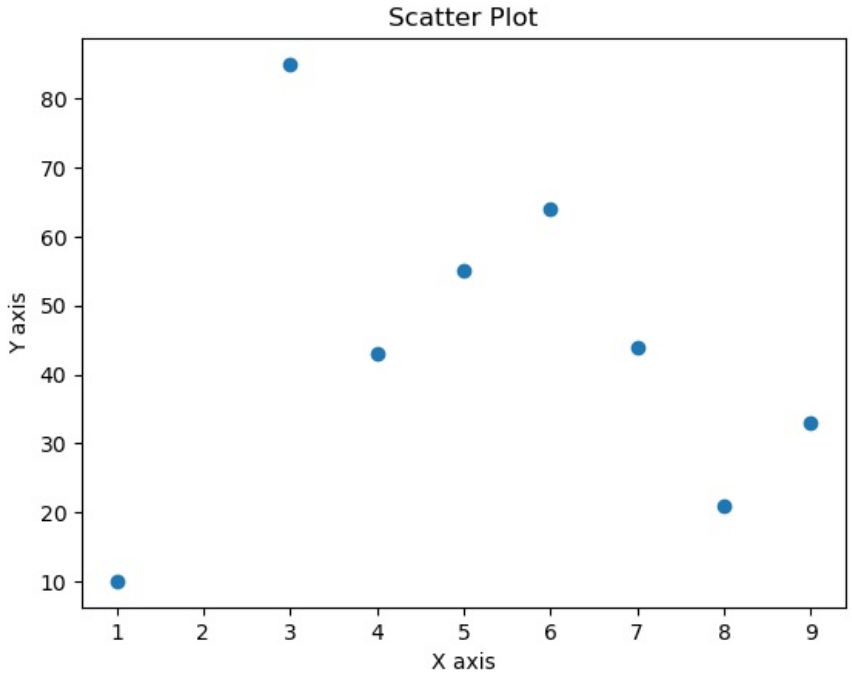


In [44]:
```
plt.bar(x,y)
```

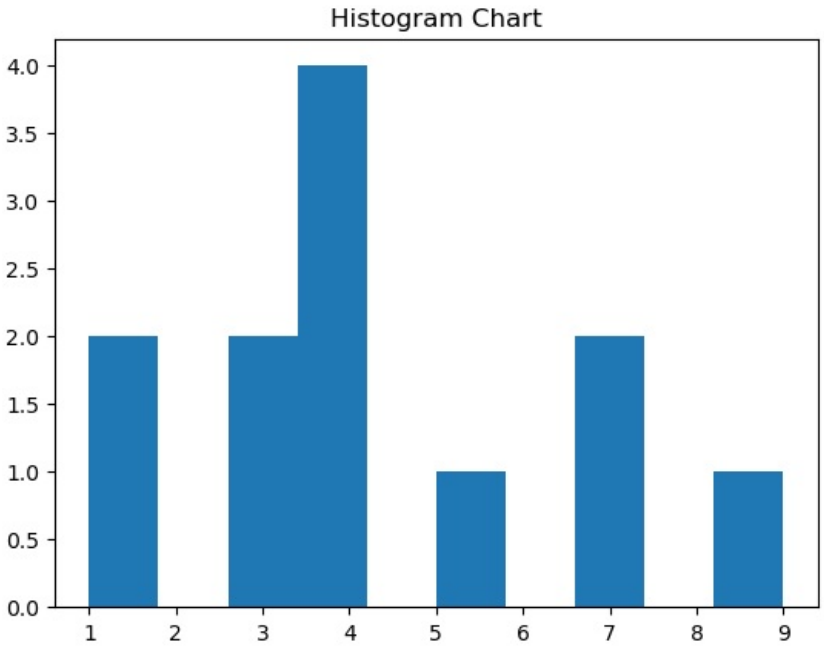
```
plt.title("Bar")
plt.xlabel("X axis")
plt.ylabel("Y axis")
plt.show()
```



In [47]:
```
a=(1,5,8,6,3,7,9,4)
b=(10,55,21,64,85,44,33,43)
plt.scatter(a,b)
plt.title("Scatter Plot")
plt.xlabel("X axis")
plt.ylabel("Y axis")
plt.show()
```



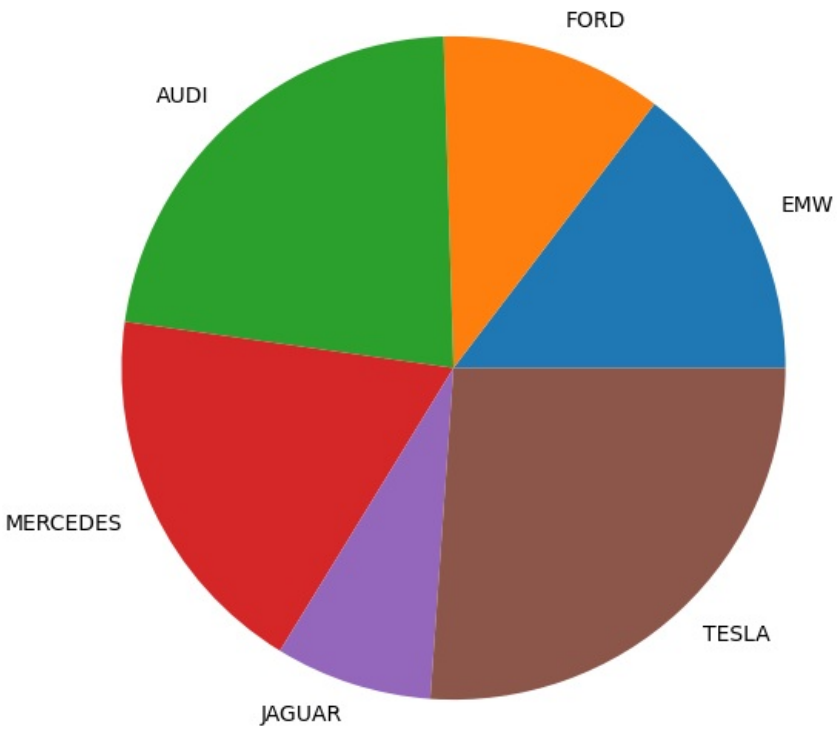
In [49]:
```
H=[1,1,7,5,4,4,4,9,3,3,7,4]
plt.hist(H)
plt.title("Histogram Chart")
plt.show()
```



In [51]:
```
cars=['EMW','FORD','AUDI','MERCEDES','JAGUAR','TESLA']
```

In [53]:
```
data=[23,17,35,29,12,41]
```

In [55]:
```
fig=plt.figure(figsize=(10,7))
plt.pie(data,labels=cars)
plt.show()
```



In [ ]: