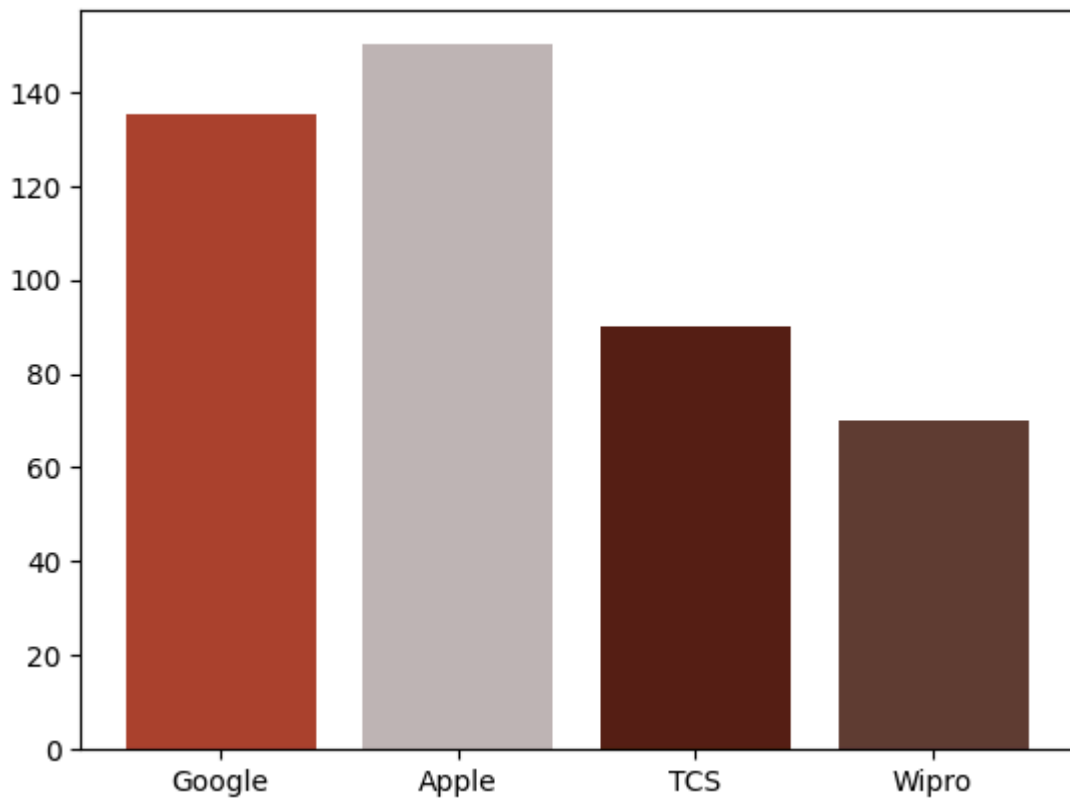


```
In [1]: # Bar Chart

import matplotlib.pyplot as plt
import numpy as np
```

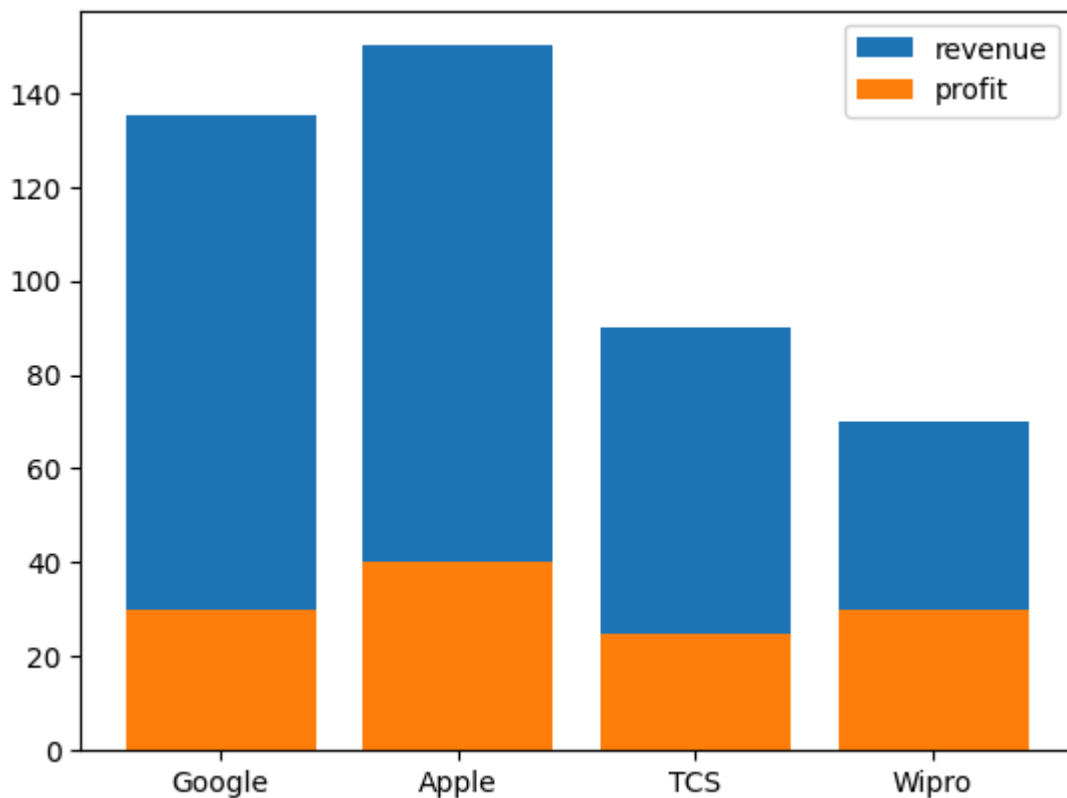
```
In [38]: company = ["Google", "Apple", "TCS", "Wipro"]
revenue = [135, 150, 90, 70]

plt.bar(company, revenue, color= ["#AB4430", "#C2B8B6", "#572015", "#633C35"])
plt.show()
```



```
In [3]: company = ["Google", "Apple", "TCS", "Wipro"]
revenue = [135, 150, 90, 70]
profit = [30, 40, 25, 30]

plt.bar(company, revenue, label= "revenue")
plt.bar(company, profit, label= "profit")
plt.legend()
plt.show()
```

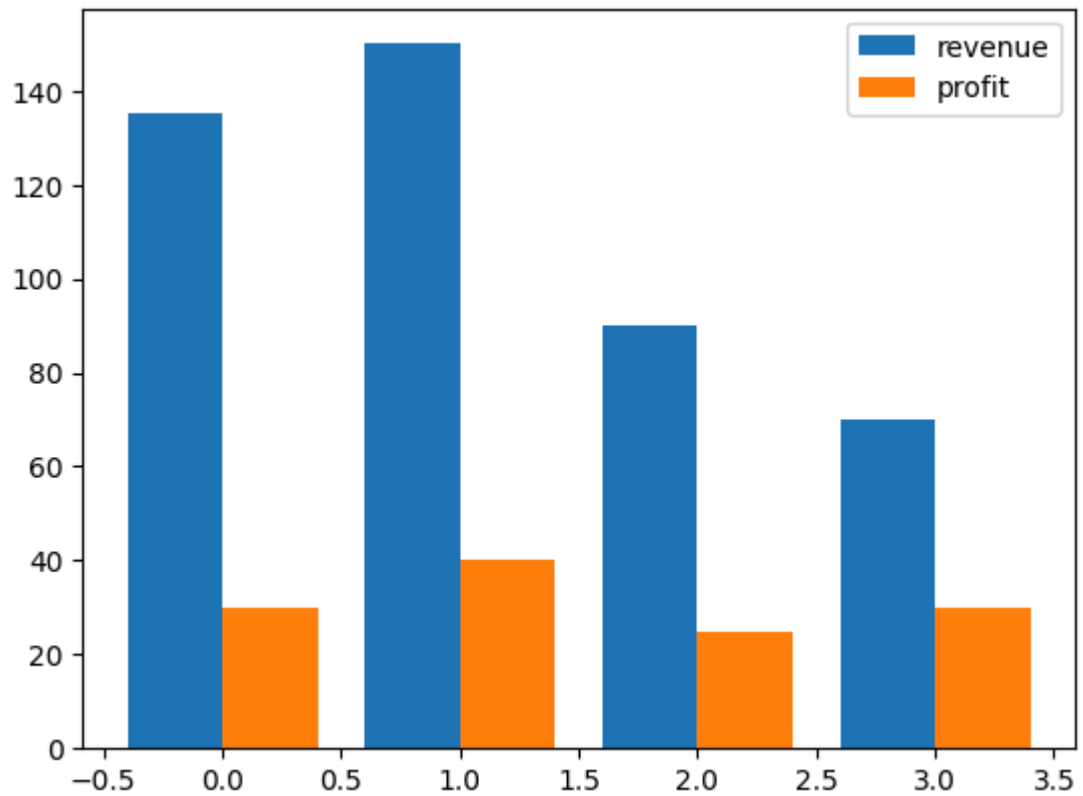


```
In [8]: np.arange(len(company))
```

```
Out[8]: array([0, 1, 2, 3])
```

```
In [9]: company = ["Google","Apple","TCS","Wipro"]
revenue = [135,150,90,70]
profit = [30,40,25,30]

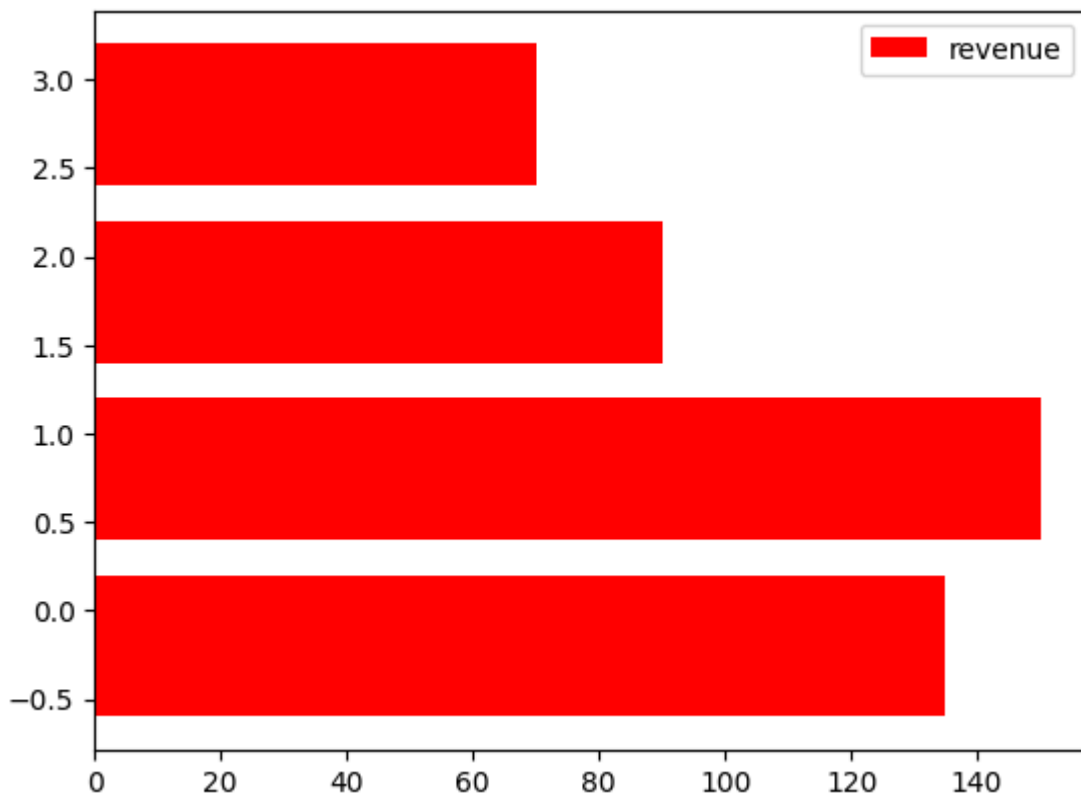
comp_num = np.arange(len(company))
plt.bar(comp_num - 0.2,revenue, label= "revenue",width=0.4)
plt.bar(comp_num + 0.2,profit, label= "profit",width=0.4)
plt.legend()
plt.show()
```



```
In [14]: # HBAR

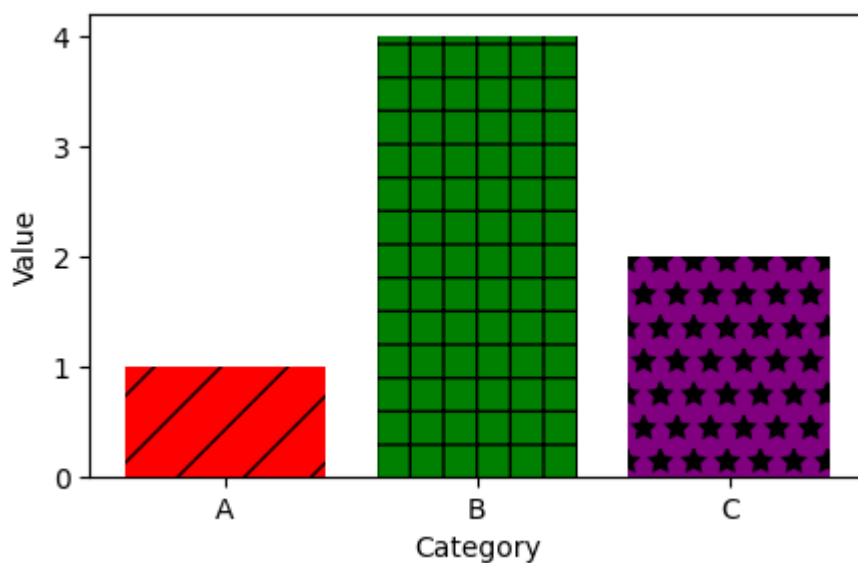
company = ["Google", "Apple", "TCS", "Wipro"]
revenue = [135, 150, 90, 70]
profit = [30, 40, 25, 30]

comp_num = np.arange(len(company))
plt.barh(comp_num - 0.2, revenue, label= "revenue", color="red")
plt.legend()
plt.show()
```



```
In [26]: labels = ["A", "B", "C"]
values = [1, 4, 2]
colors = ["red", "green", "purple"]

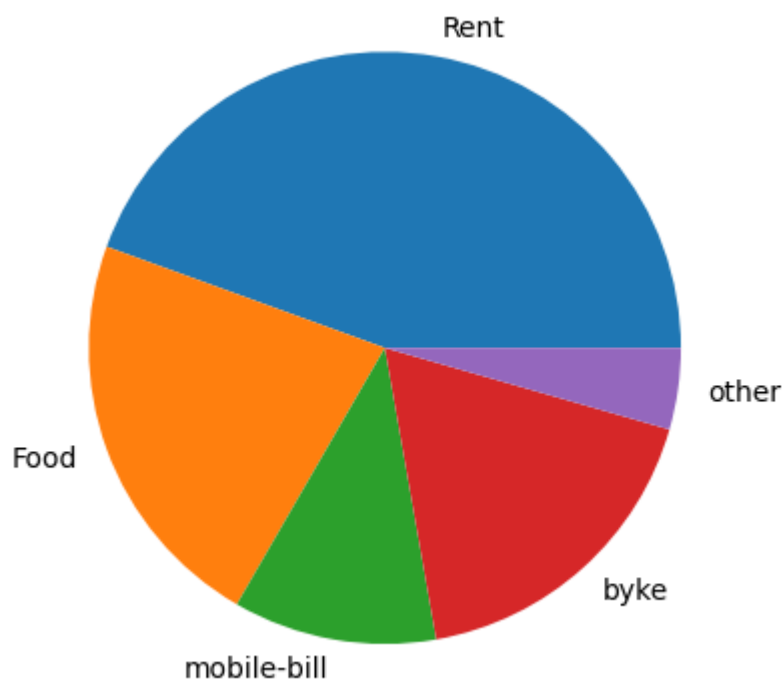
plt.figure(figsize=(5, 3), dpi=100)
bars = plt.bar(labels, values, color= colors)
plt.xlabel("Category")
plt.ylabel("Value")
patteren = ["/", "+", "*"]
for bar in bars:
    bar.set_hatch(patteren.pop(0))
plt.show()
```



## Pie Chart

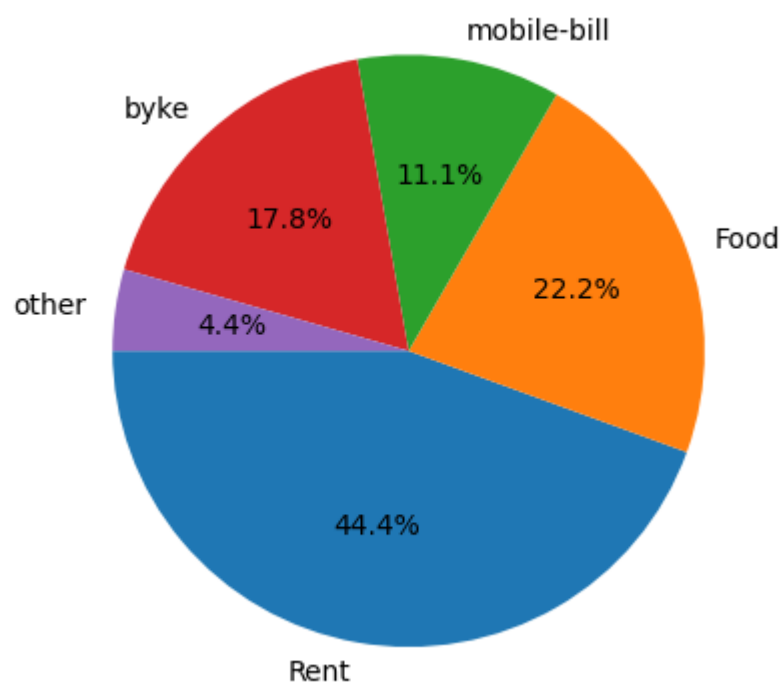
```
In [39]: comp_exp = [2000,1000,500,800,200]
comp_labels = ["Rent","Food","mobile-bill","byke","other"]

plt.pie(comp_exp,labels=comp_labels)
plt.show()
```



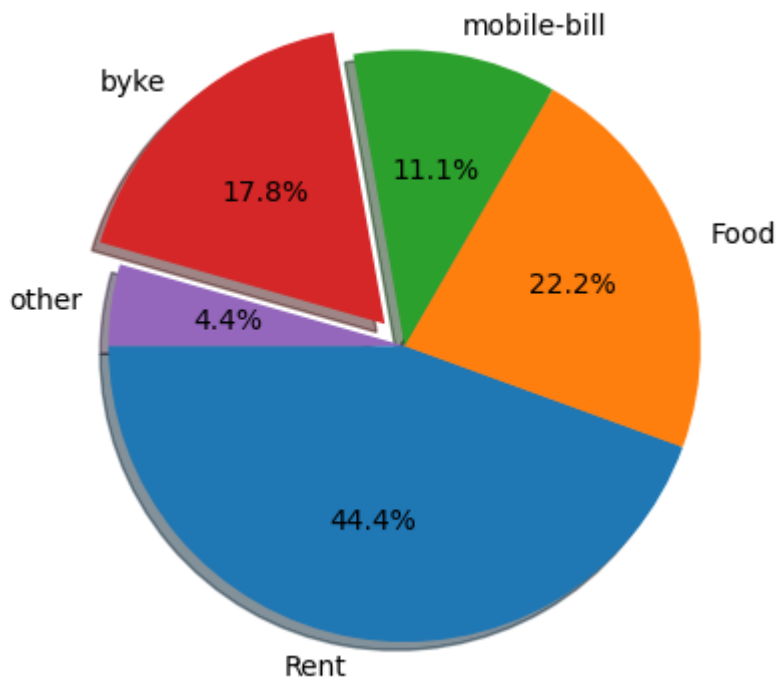
```
In [46]: comp_exp = [2000,1000,500,800,200]
comp_labels = ["Rent","Food","mobile-bill","byke","other"]

plt.pie(comp_exp,labels=comp_labels,autopct="%2.1f%%",startangle=180)
plt.show()
```



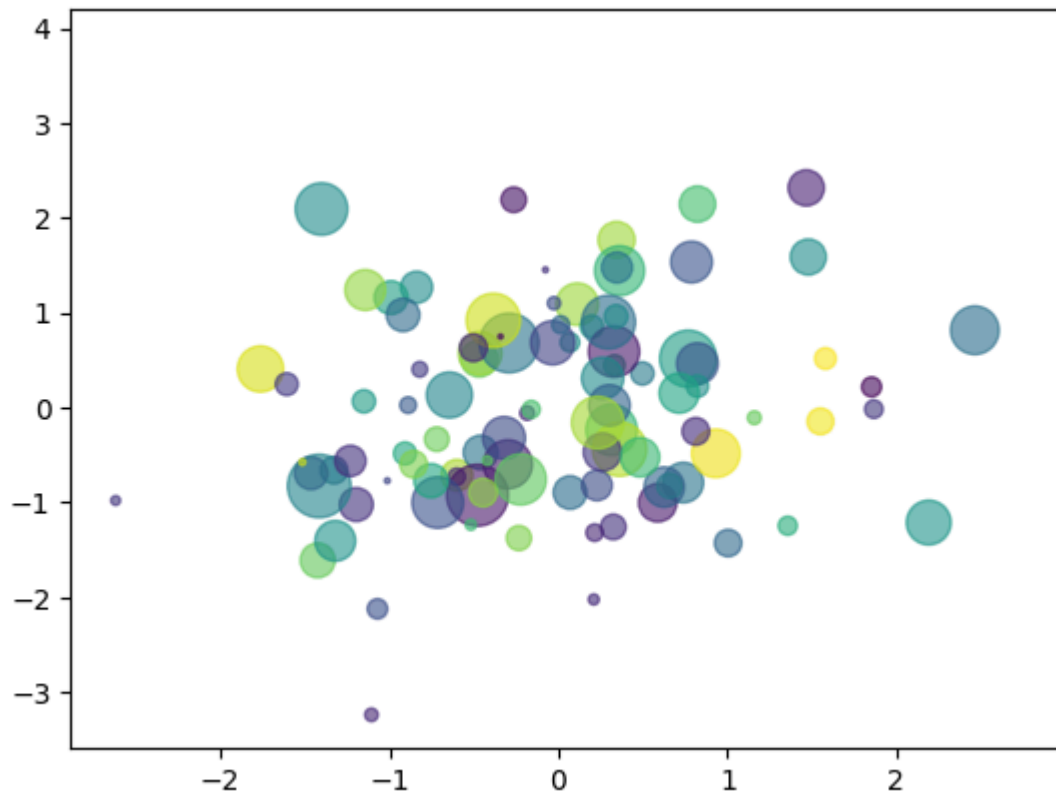
```
In [50]: comp_exp = [2000,1000,500,800,200]
comp_labels = ["Rent","Food","mobile-bill","byke","other"]

plt.pie(comp_exp,labels=comp_labels,autopct="%2.1f%%",startangle=180,explode=[0,
plt.show()
```



```
In [58]: # scatter chart
np.random.seed(42)
n=200
x = np.random.randn(n)
y = np.random.randn(n)
colors = np.random.rand(n)
sizes = 200 * np.random.randn(n)

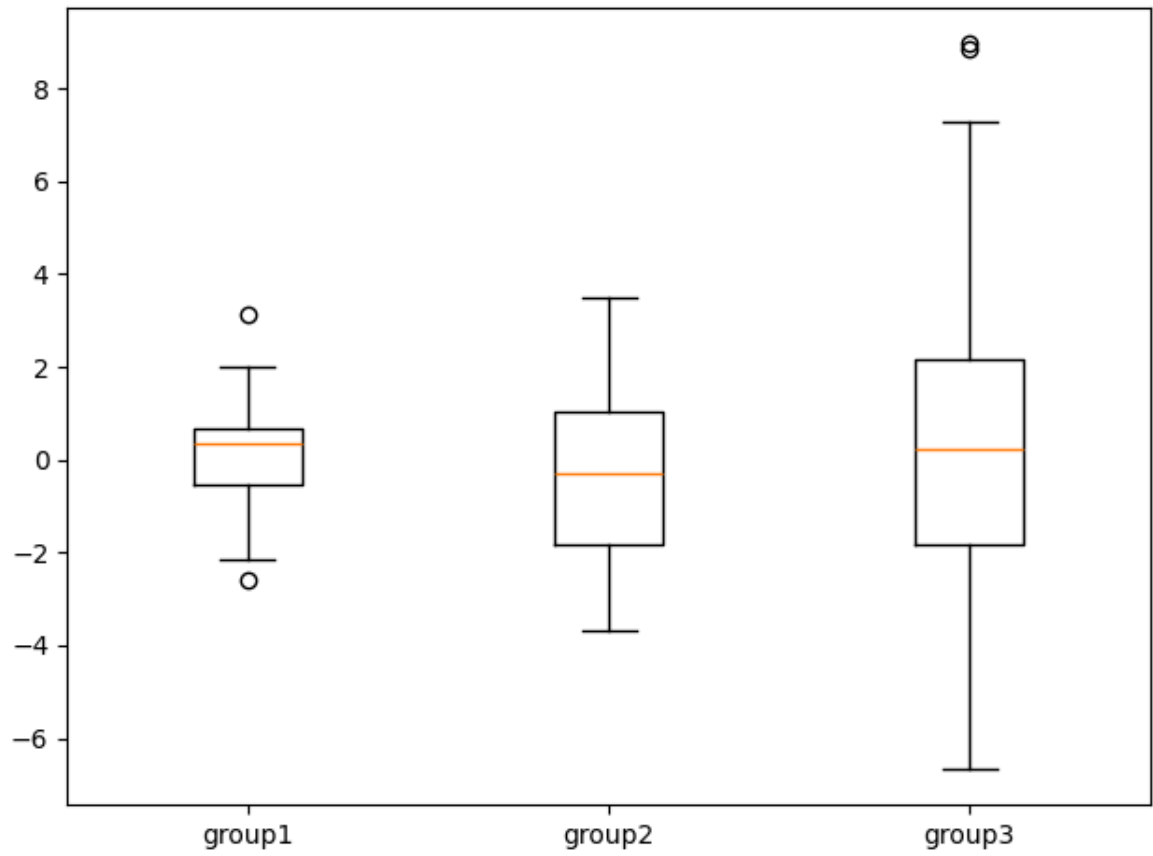
plt.scatter(x,y,c= colors,s= sizes,alpha=0.6,cmap="viridis")
plt.show()
```



```
In [65]: # Box Plot

import warnings
warnings.filterwarnings("ignore")

data = [np.random.normal(0,std,100) for std in range(1,4)]
plt.boxplot(data,labels = ["group1","group2","group3"])
plt.tight_layout()
plt.show()
```



In [ ]: