

In [1]:	<pre>import numpy as np import pandas as pd</pre>																																				
In [3]:	<pre>A=pd.DataFrame([28,33,30,29,28,29,27,31,30,32,28,33,25,29,27]) B=pd.DataFrame([28,33,30,29,28,29,27,31,30,32,28,33,25,29,27]) C=pd.DataFrame([28,33,30,29,28,29,27,31,30,32,28,33,25,29,27])</pre>																																				
In [23]:	<pre>no_=[A,B,C]</pre>																																				
In [35]:	<pre>A=pd.DataFrame([28,33,30,29,28,29,27,31,30,32,28,33,25,29,27]) B=pd.DataFrame([31,32,30,30,33,32,34,27,36,30,34,34,31,35,36]) C=pd.DataFrame([30,33,32,28,37,28,34,27,36,30,34,34,31,35,36])</pre>																																				
In [5]:	<pre>dfs=[A,B,C]</pre>																																				
In [31]:	<pre>abc=pd.concat(dfs,axis=1) abc.columns=["A","B", ,"C"] abc.describe().T</pre> <table><thead><tr><th></th><th>count</th><th>mean</th><th>std</th><th>min</th><th>25%</th><th>50%</th><th>75%</th><th>max</th></tr></thead><tbody><tr><td>A</td><td>15.0</td><td>29.266667</td><td>2.282438</td><td>25.0</td><td>28.0</td><td>29.0</td><td>30.5</td><td>33.0</td></tr><tr><td>B</td><td>15.0</td><td>32.333333</td><td>2.554175</td><td>27.0</td><td>30.5</td><td>32.0</td><td>34.0</td><td>36.0</td></tr><tr><td>C</td><td>15.0</td><td>35.400000</td><td>7.028513</td><td>20.0</td><td>31.5</td><td>35.0</td><td>40.5</td><td>44.0</td></tr></tbody></table>		count	mean	std	min	25%	50%	75%	max	A	15.0	29.266667	2.282438	25.0	28.0	29.0	30.5	33.0	B	15.0	32.333333	2.554175	27.0	30.5	32.0	34.0	36.0	C	15.0	35.400000	7.028513	20.0	31.5	35.0	40.5	44.0
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In [11]:	<pre>#Varsayımlar</pre>																																				
In [32]:	<pre>from scipy.stats import shapiro shapiro(A) shapiro(B) shapiro(C)</pre> <p>(0.9081265330314636, 0.12674275040626526)</p>																																				
In [15]:	<pre>from scipy.stats import levene</pre>																																				
In [37]:	<pre>levene(abc.A,abc.B,abc.C)</pre> <p>LeveneResult(statistic=8.856829161176988, pvalue=0.0006175723502578991)</p>																																				
In [27]:	<pre>from scipy.stats import f_oneway</pre>																																				
In [44]:	<pre>f_oneway(abc.A,abc.B,abc.C)</pre> <p>F_onewayResult(statistic=6.922573609596511, pvalue=0.002520814306259164)</p>																																				
In [45]:	<pre>#Hipotez reddedilir yani bu ölçüler arasında istatistiksel olarak bir fark vardı</pre>																																				
In [47]:	<pre>#Nonparametriklik için kontrol</pre>																																				
In [48]:	<pre>from scipy.stats import kruskal kruskal(abc.A,abc.B,abc.C)</pre> <p>KruskalResult(statistic=12.900174496940776, pvalue=0.0015803842766101068)</p>																																				
In [49]:	<pre>##%95 güvenirlilik ile ho reddedilir yani bir fark vardır</pre>																																				

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