

In [4]:

```
import numpy as np
import pandas as pd

ipl18 = pd.DataFrame({'Team': ['SRH', 'CSK', 'KKR', 'RR', 'MI', 'RCB', 'KXIP', 'DD'],
                      'Matches': [14, 14, 14, 14, 14, 14, 14, 14],
                      'Won': [9, 9, 8, 7, 6, 6, 6, 5],
                      'Lost': [5, 5, 6, 7, 8, 8, 8, 9],
                      'Tied': [0, 0, 0, 0, 0, 0, 0, 0],
                      'N/R': [0, 0, 0, 0, 0, 0, 0, 0],
                      'Points': [18, 18, 16, 14, 12, 12, 12, 10],
                      'NRR': [0.284, 0.253, -0.070, -0.250, 0.317, 0.129, -0.502, -0.222],
                      'For': [2230, 2488, 2363, 2130, 2380, 2322, 2210, 2297],
                      'Against': [2193, 2433, 2425, 2141, 2282, 2383, 2259, 2304]},
                      index = range(1,9)
)

ipl18

ipl17 = pd.DataFrame({'Team': ['MI', 'RPS', 'SRH', 'KKR', 'KXIP', 'DD', 'GL', 'RCB'],
                      'Matches': [14, 14, 14, 14, 14, 14, 14, 14],
                      'Won': [10, 9, 8, 8, 7, 6, 4, 3],
                      'Lost': [4, 5, 5, 6, 7, 8, 10, 10],
                      'Tied': [0, 0, 0, 0, 0, 0, 0, 0],
                      'N/R': [0, 0, 1, 0, 0, 0, 0, 1],
                      'Points': [20, 18, 17, 16, 14, 12, 8, 7],
                      'NRR': [0.784, 0.176, 0.469, 0.641, 0.123, -0.512, -0.412, -1.299],
                      'For': [2407, 2180, 2221, 2329, 2207, 2219, 2406, 1845],
                      'Against': [2242, 2165, 2118, 2300, 2229, 2255, 2472, 2033]},
                      index = range(1,9)
)

ipl17
```

""Question-1: Suppose in 'ipl18', you want to filter out the teams that have an NRR greater and for which the 'For' score exceeds the 'Against' score, i.e. both the conditions should be met. Which teams will be left after you perform the above filtration ?

a) CSK, MI b) SRH,CSK, MI c) SRH,CSK, RCB d) SRK,CSK, MI,RCB  
""

*#Solution of Question 1*

```
ipl18[(ipl18['NRR'] > 0) & (ipl18['For'] > ipl18['Against'])]
```

Out[4]:

	Team	Matches	Won	Lost	Tied	N/R	Points	NRR	For	Against
1	SRH	14	9	5	0	0	18	0.284	2230	2193
2	CSK	14	9	5	0	0	18	0.253	2488	2433
5	MI	14	6	8	0	0	12	0.317	2380	2282

In [ ]:

Answer = b) SRH, CSK, MI

```

In [1]: import numpy as np
import pandas as pd

ipl18 = pd.DataFrame({'Team': ['SRH', 'CSK', 'KKR', 'RR', 'MI', 'RCB', 'KXIP', 'DD'],
                      'Matches': [14, 14, 14, 14, 14, 14, 14, 14],
                      'Won': [9, 9, 8, 7, 6, 6, 6, 5],
                      'Lost': [5, 5, 6, 7, 8, 8, 8, 9],
                      'Tied': [0, 0, 0, 0, 0, 0, 0, 0],
                      'N/R': [0, 0, 0, 0, 0, 0, 0, 0],
                      'Points': [18, 18, 16, 14, 12, 12, 12, 10],
                      'NRR': [0.284, 0.253, -0.070, -0.250, 0.317, 0.129, -0.502, -0.222],
                      'For': [2230, 2488, 2363, 2130, 2380, 2322, 2210, 2297],
                      'Against': [2193, 2433, 2425, 2141, 2282, 2383, 2259, 2304]}},
                    index = range(1,9)
)

ipl18

ipl17 = pd.DataFrame({'Team': ['MI', 'RPS', 'SRH', 'KKR', 'KXIP', 'DD', 'GL', 'RCB'],
                      'Matches': [14, 14, 14, 14, 14, 14, 14, 14],
                      'Won': [10, 9, 8, 8, 7, 6, 4, 3],
                      'Lost': [4, 5, 5, 6, 7, 8, 10, 10],
                      'Tied': [0, 0, 0, 0, 0, 0, 0, 0],
                      'N/R': [0, 0, 1, 0, 0, 0, 0, 1],
                      'Points': [20, 18, 17, 16, 14, 12, 8, 7],
                      'NRR': [0.784, 0.176, 0.469, 0.641, 0.123, -0.512, -0.412, -1.299],
                      'For': [2407, 2180, 2221, 2329, 2207, 2219, 2406, 1845],
                      'Against': [2242, 2165, 2118, 2300, 2229, 2255, 2472, 2033]}},
                    index = range(1,9)
)

ipl17

"""
Q2. If all the stats are taken for both 'ipl17' and 'ipl18',
which team with its total points greater than 25 will have the highest win percentage
"""

#Solution of Question 2
combined_table = pd.concat([ipl17,ipl18]).groupby('Team').sum().sort_values('Points', ascending=False)
df= combined_table.loc[(combined_table['Points'] > 25)]
print([(df['Won'] / df['Matches'] * 100)])

```

```
[ Team  
SRH      60.714286  
KKR      57.142857  
MI       57.142857  
KXIP     46.428571  
dtype: float64]
```

```
In [ ]: Answer = SRH
```