In [1]:

```python
import numpy as np
import pandas as pd
```

In [2]:

```python
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
```

Out[2]:

	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
3	KKR	14	8	6	0	0	16	-0.070	2363	2425
4	RR	14	7	7	0	0	14	-0.250	2130	2141
5	MI	14	6	8	0	0	12	0.317	2380	2282
6	RCB	14	6	8	0	0	12	0.129	2322	2383
7	KXIP	14	6	8	0	0	12	-0.502	2210	2259
8	DD	14	5	9	0	0	10	-0.222	2297	2304

In [3]:

```python
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
```

Out[3]:

	Team	Matches	Won	Lost	Tied	N/R	Points	NRR	For	Against
1	MI	14	10	4	0	0	20	0.784	2407	2242
2	RPS	14	9	5	0	0	18	0.176	2180	2165
3	SRH	14	8	5	0	1	17	0.469	2221	2118
4	KKR	14	8	6	0	0	16	0.641	2329	2300
5	KXIP	14	7	7	0	0	14	0.123	2207	2229
6	DD	14	6	8	0	0	12	-0.512	2219	2255
7	GL	14	4	10	0	0	8	-0.412	2406	2472
8	RCB	14	3	10	0	1	7	-1.299	1845	2033

Question-1:

Suppose in 'ipl18', you want to filter out the teams that have an NRR greater than zero, and for which the 'For' score exceeds the 'Against' score, i.e. both the conditions should be satisfied. 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

Answer-1: b)

Solution 1:

In [4]:

```
ipl18
```

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
3	KKR	14	8	6	0	0	16	-0.070	2363	2425
4	RR	14	7	7	0	0	14	-0.250	2130	2141
5	MI	14	6	8	0	0	12	0.317	2380	2282
6	RCB	14	6	8	0	0	12	0.129	2322	2383
7	KXIP	14	6	8	0	0	12	-0.502	2210	2259
8	DD	14	5	9	0	0	10	-0.222	2297	2304

In [5]:

```python
for x in range(1,8):
    if ipl18.loc[x].at['For']>ipl18.loc[x].at['Against']:
        if ipl18.loc[x].at['NRR']>0:
            print(ipl18.loc[x].at['Team'])
```

```
SRH
CSK
MI
```

Question-2:

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

In [6]:

```
ipl18
```

Out[6]:

	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
3	KKR	14	8	6	0	0	16	-0.070	2363	2425
4	RR	14	7	7	0	0	14	-0.250	2130	2141
5	MI	14	6	8	0	0	12	0.317	2380	2282
6	RCB	14	6	8	0	0	12	0.129	2322	2383
7	KXIP	14	6	8	0	0	12	-0.502	2210	2259
8	DD	14	5	9	0	0	10	-0.222	2297	2304

In [7]:

```
ipl17
```

Out[7]:

	Team	Matches	Won	Lost	Tied	N/R	Points	NRR	For	Against
1	MI	14	10	4	0	0	20	0.784	2407	2242
2	RPS	14	9	5	0	0	18	0.176	2180	2165
3	SRH	14	8	5	0	1	17	0.469	2221	2118
4	KKR	14	8	6	0	0	16	0.641	2329	2300
5	KXIP	14	7	7	0	0	14	0.123	2207	2229
6	DD	14	6	8	0	0	12	-0.512	2219	2255
7	GL	14	4	10	0	0	8	-0.412	2406	2472
8	RCB	14	3	10	0	1	7	-1.299	1845	2033

In [8]:

```
total_points=ipl17['Points'].sum()+ipl18['Points'].sum()
```

In [9]:

```
for x in range(1,8):
    for y in range(1,8):
        if ipl18.loc[x].at['Team']==ipl17.loc[y].at['Team']:
            if ipl18.loc[x].at['Points']+ipl17.loc[y].at['Points']>25:
                t=ipl18.loc[x].at['Points']+ipl17.loc[y].at['Points']
                print((str)(ipl18.loc[x].at['Team'])+' has win percentage of '+(str)(round(
```

```
SRH has win percentage of 15.625%
KKR has win percentage of 14.286%
MI has win percentage of 14.286%
KXIP has win percentage of 11.607%
```