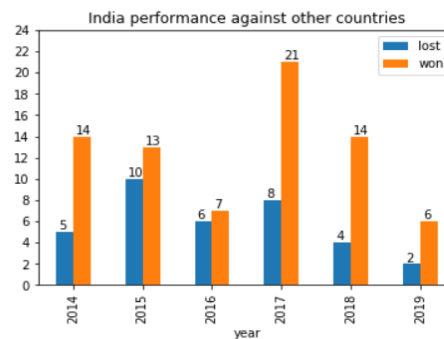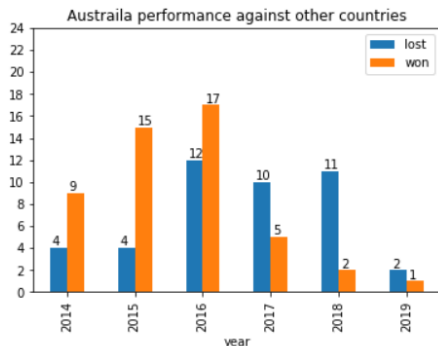Question1&2:

Who will win the series and series output?

Performance of Australia in last five years is going down and While the performance of India is going up. So India is performing well in recent times.
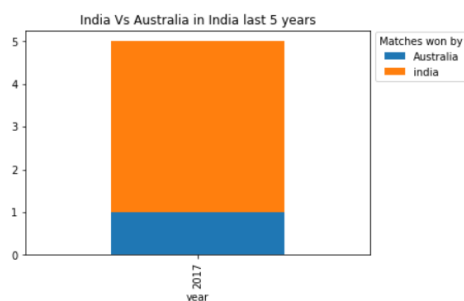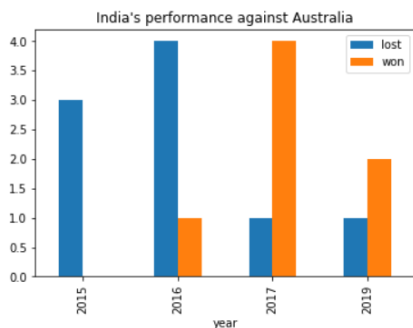

Graphs will sometimes misguide us as they show only trend. So we calculated win percentage to make sure that our assumption is correct.

Country	Winning Percentage(Last 5 Years)	Winning Percentage(Last 2 Years)
Australia	53.2608695652174	25.806451612903224
India	68.18181818181817	74.54545454545455

In last two years Australia performance is bad very compared to India. From this India can have better chance of winning series? Let's do one more test – How India and Australia when played head to head?

In 2015 and 2016, Australia dominated completely. But in last two years India picked up very well and dominated Australia. Even from this analysis we can say India is the favorite team.

As the series is going to happen in India. Let's check the results in Indian subcontinent. Australia and India together played only one series in last five years and in that India won the series with 4-1.
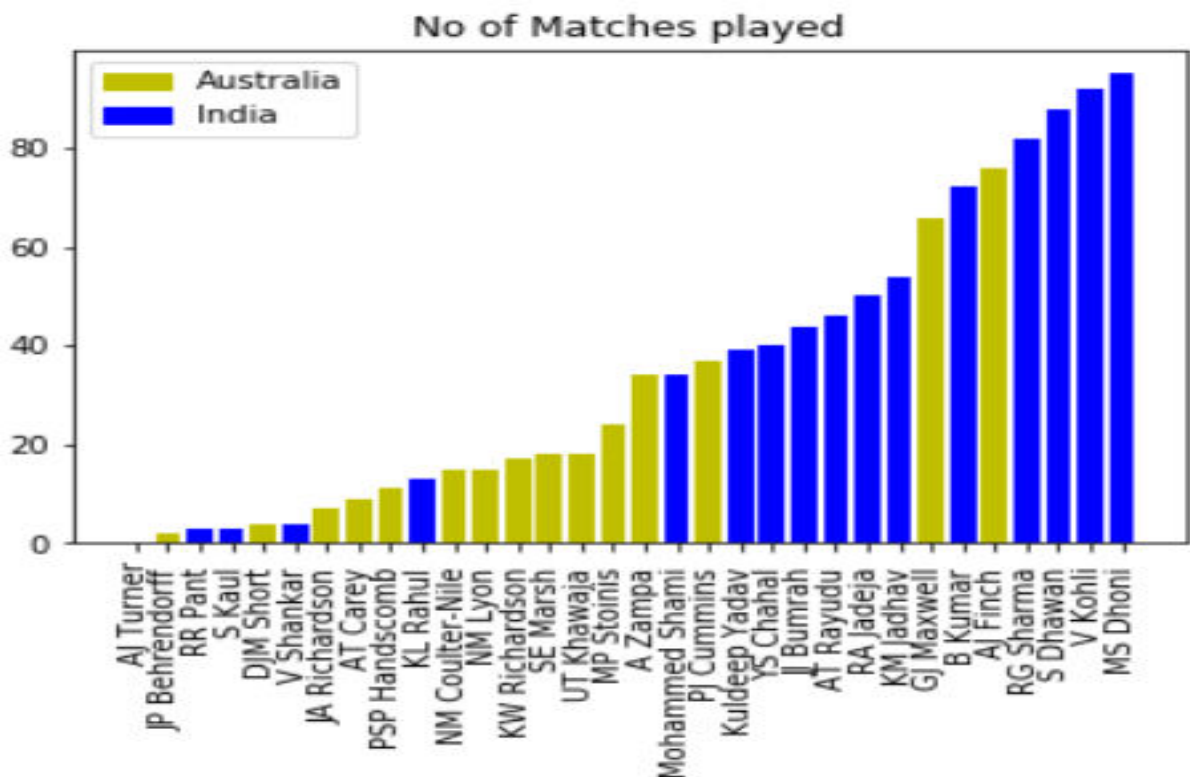
Country	Winning Percentage(Last 5 Years)	Winning Percentage(Last 2 Years)
India (Against Australia)	43.75	75.0

India win percentage in last two years against Australia is 75% and against other countries it is 74.45%. On the other hand Australia winning percentage went down to 25% against India and other countries.

So India will win the series with 75% wins. So in 5 match series it will be 4-1. India will win 4 out of 5 matches in this series.

Lets us check why Australia is not performing well in last two years?

No of matches played by each player from both the teams in last two years:

Most of the Australian players in the squad have played very few matches which tell that Australian team got new players in last few years. These players failed to perform better when compared the veterans who retired before two years.

Let see how players performance is affecting win percentage.

Players with high Batting average & Bowling Average:

```
['V Kohli ',          ['Kuldeep Yadav ',
 'RG Sharma ',         'JJ Bumrah ',
 'AT Rayudu ',         'Mohammed Shami ',
 'S Dhawan ',          'YS Chahal ',
 'MS Dhoni ',          'PJ Cummins ',
 'KM Jadhav ',         'GJ Maxwell ',
 'MP Stoinis ',        'B Kumar ',
 'AJ Finch ',          'A Zampa ',
 'GJ Maxwell ',        'RA Jadeja ']
 'RA Jadeja ']
```

Indian players are dominating in batting and bowling when compared to Australian which may be the reason for Indian winning percentage.

Question3.

Who will get more runs?

Batting average is the best criteria to predict the player performance.

<mark>Last 5 years:</mark>

	Player	Mat	Runs	Bat Av
0	V Kohli	92	5088	70.66
2	RG Sharma	82	4489	63.22
4	AT Rayudu	46	1503	51.82
3	S Dhawan	88	3866	46.57
7	MS Dhoni	95	2369	43.87
8	KM Jadhav	54	1002	43.56
22	MP Stoinis	24	807	42.47
16	AJ Finch	76	2672	37.11
23	GJ Maxwell	66	1706	31.59
14	RA Jadeja	50	523	27.52

Considering the above stats, Kohli will be our favorite. In last two years we played only 5 matches with Australia in India. We cannot estimate run scorer from these five matches. Let's check the players performance in last two years.

	Player	Mat	Runs	Bat Av
0	V Kohli	43.0	2778	89.61
2	RG Sharma	48.0	2677	66.92
4	AT Rayudu	18.0	606	50.50
7	MS Dhoni	52.0	1140	49.56
3	S Dhawan	47.0	2088	48.55
16	AJ Finch	20.0	864	43.20
22	MP Stoinis	21.0	615	36.17
8	KM Jadhav	39.0	534	35.60
23	GJ Maxwell	16.0	370	28.46
15	B Kumar	44.0	269	26.90

	Player	Mat	Runs	Bat Av
0	V Kohli	14	945	78.75
2	RG Sharma	21	1214	75.87
8	KM Jadhav	14	204	68.00
4	AT Rayudu	18	606	50.50
3	S Dhawan	21	817	40.85
7	MS Dhoni	20	448	40.72
22	MP Stoinis	11	241	24.10
16	AJ Finch	11	244	22.18
14	RA Jadeja	11	76	19.00
10	Kuldeep Yadav	19	55	18.33

From all the above we can say **Kohli will be the highest run scorer.**

Question4.

Who will take more wickets? Similar to batting average we can consider bowling average as criteria to select the best bowler.

```
['Kuldeep Yadav ',
 'JJ Bumrah ',
 'Mohammed Shami ',
 'YS Chahal ',
 'PJ Cummins ',
 'GJ Maxwell ',
 'B Kumar ',
 'A Zampa ',
 'RA Jadeja ']
```

Kuldeep Yadav will take more wickets.

Question5.

Who will get more Sixes?

The number of balls it take to hit a six will be the best criteria. Rohit Sharma is hitting six for every 30 balls he is facing.

	Player	Country	Role	Span	Mat	Runs	BF	SR	4s	6s	4_rate	6_rate
0	V Kohli (INDIA)	India	Batsman	2014-2019	92.0	5088	5291	96.16	455	67	11.628571	78.970149
3	S Dhawan (INDIA)	India	Batsman	2014-2019	88.0	3866	4108	94.10	482	53	8.522822	77.509434
4	AT Rayudu (INDIA)	India	Batsman	2014-2019	46.0	1503	1823	82.44	130	28	14.023077	65.107143
7	MS Dhoni (INDIA)	India	Batsman/WK	2014-2019	95.0	2369	2861	82.80	173	47	16.537572	60.872340
16	AJ Finch (AUS)	Australia	Batsman	2014-2019	76.0	2672	3035	88.03	267	60	11.367041	50.583333
2	RG Sharma (INDIA)	India	Batsman	2014-2019	82.0	4489	4620	97.16	416	153	11.105769	30.196078

Not only the six rate but also number runs will also impact the sixes. The person who scores high generally gets more number of boundaries.

When consider runs we have already seen Kohli and Rohit top the race.

	Player	Mat	Runs	Bat Av
0	V Kohli	14	945	78.75
2	RG Sharma	21	1214	75.87
8	KM Jadhav	14	204	68.00
4	AT Rayudu	18	606	50.50
3	S Dhawan	21	817	40.85
7	MS Dhoni	20	448	40.72
22	MP Stoinis	11	241	24.10
16	AJ Finch	11	244	22.18
14	RA Jadeja	11	76	19.00
10	Kuldeep Yadav	19	55	18.33

Kohli and Rohit Sharma almost got 75 runs at an average per match. But Rohit is getting six for every 30 balls he is playing. So Rohit will hit more sixes.

Rohit Sharma will hit more sixes.

Question6.

Who will get more Fours?

Similar to 6, I have calculated the rate at which four is hit.

	Player	Country	Role	Span	Mat	Runs	BF	SR	4s	6s	4_rate	6_rate
7	MS Dhoni (INDIA)	India	Batsman/WK	2014-2019	95.0	2369	2861	82.80	173	47	16.537572	60.872340
4	AT Rayudu (INDIA)	India	Batsman	2014-2019	46.0	1503	1823	82.44	130	28	14.023077	65.107143
0	V Kohli (INDIA)	India	Batsman	2014-2019	92.0	5088	5291	96.16	455	67	11.628571	78.970149
16	AJ Finch (AUS)	Australia	Batsman	2014-2019	76.0	2672	3035	88.03	267	60	11.367041	50.583333
2	RG Sharma (INDIA)	India	Batsman	2014-2019	82.0	4489	4620	97.16	416	153	11.105769	30.196078
3	S Dhawan (INDIA)	India	Batsman	2014-2019	88.0	3866	4108	94.10	482	53	8.522822	77.509434

Shikar Dhawan topped the list by hitting 4 for every 8 balls he is facing. But number of fours will also depend on the total runs that batsman is getting, Dhawan will not be my option as his performance in last one year is not the best when compared to others.

```
       Player   Mat   Runs   Bat Av
0      V Kohli   14    945    78.75
2    RG Sharma   21   1214    75.87
8    KM Jadhav   14    204    68.00
4    AT Rayudu   18    606    50.50
3    S Dhawan    21    817    40.85
7    MS Dhoni    20    448    40.72
22   MP Stoinis  11    241    24.10
16    AJ Finch   11    244    22.18
14   RA Jadeja   11     76    19.00
10  Kuldeep Yadav 19    55    18.33
```

The next in the list is Rohit Sharma who is getting four for every 11 balls he is facing. Rohit also topped in total runs along with Kohli. In getting fours also Kohli is almost near to Rohit even after playing more number of balls than Rohit. **It's difficult to judge between Rohit and Kohli here. But I will choose Rohit as he has better 4 rate, more over a opener always has an edge to get more boundaries in powerplay.**

Rohit will hit more boundaries.

The person who hits more boundaries generally will have high strike rate. Let's check if our selection of Rohit is correct calculating Strike rate.

	Player	Country	Role	Span	Mat	Runs	BF	SR	4s	6s	4_rate	6_rate
2	RG Sharma (INDIA)	India	Batsman	2014-2019	82.0	4489	4620	97.16	416	153	11.105769	30.196078
0	V Kohli (INDIA)	India	Batsman	2014-2019	92.0	5088	5291	96.16	455	67	11.628571	78.970149
3	S Dhawan (INDIA)	India	Batsman	2014-2019	88.0	3866	4108	94.10	482	53	8.522822	77.509434
16	AJ Finch (AUS)	Australia	Batsman	2014-2019	76.0	2672	3035	88.03	267	60	11.367041	50.583333
7	MS Dhoni (INDIA)	India	Batsman/WK	2014-2019	95.0	2369	2861	82.80	173	47	16.537572	60.872340
4	AT Rayudu (INDIA)	India	Batsman	2014-2019	46.0	1503	1823	82.44	130	28	14.023077	65.107143

As expected Rohit topped the list. But Kohli is also very near to him.

Final Conclusion:

Series Winner - India with 4-1

Most Runs - Virat Kohli

Most Wikets -Kuldeep Yadav

Most Sixes - Rohit Sharma

Most Fours - Rohit Sharma