EDS IA ASSIGNMENT-2 (STATEMENT FORMATION)

NAME-AISHU SINHA
ROLL NO-306
DIVISON-C
PRN-202201060068

DATASET:-

S.No.	Score	Dismisse	Captain	Player of	Against	Position	Innings	Test	Strike Rat	Venue	City	H/A	Date	Result
	1 119	No	No	Yes	England	6	4	2		Old Traffo	Manchest	Away	#######################################	Drawr
	2 148	No	No	No	Australia	6	2	3		Sydney Cr	Sydney	Away	#########	Drawr
	3 114	Yes	No	No	Australia	4	2	5		WACA Gro	Perth	Away	*******	Lost
	4 111	Yes	No	No	South Afri	4	2	2		Wanderer	Johannesl	Away	11/26/19	Drawr
	5 165	Yes	No	Yes	England	4	1	2		M. A. Chio	Chennai	Home	########	Won
	5 104	No	No	No	Sri Lanka	4	3	2		Sinhalese	Colombo	Away	7/27/199	Won
	7 142	Yes	No	No	Sri Lanka	4	1	1		K. D. Singl	Lucknow	Home	1/18/199	Won
	8 110	Yes	No	Yes	Australia	2	1		84.61	R. Premad	Colombo	Neutral	#######################################	Won
	9 115	Yes	No	Yes	New Zeala	2	2		84.55	IPCL Sport	Vadodara	Home	10/28/19	Won
1	0 105	Yes	No	No	West Indi	2	1		78.35	Sawai Ma	Jaipur	Home	#######################################	Won
1	1 179	Yes	No	No	West Indi	4	1	2		Vidarbha	Nagpur	Home	#######################################	Drawn
1	2 112	No	No	Yes	Sri Lanka	2	2		104.67	Sharjah C	Sharjah	Neutral	#######################################	Won
1	3 127	No	No	Yes	Kenya	2	2		92.02	Barabati :	Cuttack	Home	2/18/199	Won
1	4 137	Yes	No	No	Sri Lanka	2	1		100	Feroz Sha	New Delhi	Home	#######################################	Lost
1	5 100	Yes	No	No	Pakistan	2	1		90.09	Padang	Singapore	Neutral	#######################################	Lost
1	5 118	Yes	No	Yes	Pakistan	2	1		84.28	Sharjah C	Sharjah	Neutral	4/15/199	Won
1	7 122	Yes	No	No	England	4	3	1		Edgbastor	Birmingha	Away	#######################################	Lost
1	8 177	Yes	No	No	England	4	1	3		Trent Brid	Nottingha	Away	#######################################	Drawn
1	9 110	Yes	Yes	No	Sri Lanka	2	1		79.71	R. Premad	Colombo	Away	8/28/199	Lost
2	0 114	Yes	Yes	Yes	South Afri	1	1		90.47	Wankhed	Mumbai	Home	12/14/19	Won
2	1 169	Yes	Yes	No	South Afri	5	2	2		Newlands	Cape Tow	Away	#######################################	Lost
2	2 104	Yes	Yes	Yes	Zimbabwe	1	1		107.21	Willowmo	Benoni	Neutral	#######################################	Won
2	3 117	Yes	Yes	Yes	New Zeala	2	2		85.4	M. Chinna	Bangalore	Home	5/14/199	Won
2	4 143	Yes	Yes	No	Sri Lanka	4	1	1		R. Premad	Colombo	Away	#######################################	Drawn
2	5 139	Yes	Yes	No	Sri Lanka	4	2	2		Sinhalese	Colombo	Away	#######################################	Drawn
2	5 148	Yes	Yes	No	Sri Lanka	5	1	3		Wankhed	Mumbai	Home	#########	Drawn
2	7 155	No	No	Yes	Australia	4	3	1		M. A. Chio	Chennai	Home	**********	Won
2	8 177	Yes	No	No	Australia	4	1	3		M. Chinna	Bangalore	Home	3/25/199	Lost
2	9 100	Yes	No	Yes	Australia	2	2		112.35	Green Par	Kannur	Home	########	Won

STATEMENT'S:-

- 1. Create a function to calculate the batting average for each match.
- 2. Implement a sorting algorithm to arrange the matches based on the batting average in descending order.
- 3. Write a program to find the highest score achieved against each opponent team.
- 4. Create a function to calculate the percentage of matches won for each team.
- 5. Implement a search algorithm to find the matches where the player was dismissed after scoring a century.
- 6. Write a program to calculate the run rate for each match.
- 7. Create a function to identify the top 5 venues with the highest average scores.
- 8. Implement a data visualization tool to display the batting performance over time.
- 9. Write a program to calculate the average score for matches played in each year.
- 10. Create a function to determine the number of matches won consecutively by a team.
- 11. Implement a search algorithm to find the matches where the player was named Player of the Match in a winning cause.
- 12. Write a program to find the number of matches won in each city.
- 13. Create a function to calculate the strike rate in the first innings versus the second innings.
- 14. Implement a data analysis tool to identify any correlation between the player's score and the match result.
- 15. Write a program to find the longest streak of matches without being dismissed.
- 16. Create a function to calculate the percentage of matches won after batting first.
- 17. Implement a search algorithm to find the matches where the player scored a century and had the highest strike rate.
- 18. Write a program to calculate the average score for matches played against each opponent team.
- 19. Create a function to determine the batting performance in home matches versus away matches.
- 20. Implement a statistical analysis tool to identify any outliers in the batting score.