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Cricket World Cup Dataset - Problem Statements and Solutions

# Problem 1

Find the total number of matches played in the tournament.

Solution:

total\_matches = df['Match\_ID'].nunique()

# Problem 2

Identify the team with the most wins.

Solution:

most\_wins = df['Winning Team'].value\_counts().idxmax()

# Problem 3

Calculate the highest individual score by a player.

Solution:

highest\_score = df['Top Scorer Runs'].max()

# Problem 4

Find the player with the most wickets in the tournament.

Solution:

top\_wicket\_taker = df['Top Wicket Taker'].value\_counts().idxmax()

# Problem 5

Determine the team with the highest average runs per match.

Solution:

avg\_runs\_per\_team = df.groupby('Team')['Runs Scored'].mean().idxmax()

# Problem 6

Identify the match with the highest total runs scored.

Solution:

highest\_scoring\_match = df.groupby('Match\_ID')['Total Runs'].sum().idxmax()

# Problem 7

Find the total number of centuries scored in the tournament.

Solution:

total\_centuries = (df['Top Scorer Runs'] >= 100).sum()

# Problem 8

Calculate the strike rate of the top scorer.

Solution:

strike\_rate = (df['Top Scorer Runs'] / df['Top Scorer Balls Faced']) \* 100

# Problem 9

Find the team with the highest net run rate.

Solution:

top\_nrr\_team = df.groupby('Team')['Net Run Rate'].mean().idxmax()

# Problem 10

Determine the number of matches won by chasing teams.

Solution:

chasing\_wins = df[df['Chasing'] == 'Yes']['Winning Team'].count()

# Problem 11

Identify the bowler with the best bowling figures.

Solution:

best\_bowling\_figures = df['Best Bowling Figures'].max()

# Problem 12

Find the match with the lowest total score.

Solution:

lowest\_scoring\_match = df.groupby('Match\_ID')['Total Runs'].sum().idxmin()

# Problem 13

Calculate the average runs scored per match.

Solution:

avg\_runs\_per\_match = df['Total Runs'].mean()

# Problem 14

Find the player with the most sixes in the tournament.

Solution:

most\_sixes = df['Top Sixes'].idxmax()

# Problem 15

Identify the team that hit the most sixes overall.

Solution:

team\_most\_sixes = df.groupby('Team')['Total Sixes'].sum().idxmax()

# Problem 16

Find the venue which hosted the most matches.

Solution:

top\_venue = df['Venue'].value\_counts().idxmax()

# Problem 17

Calculate the number of matches that ended in a tie.

Solution:

tied\_matches = (df['Result'] == 'Tie').sum()

# Problem 18

Determine the average number of wickets taken per match.

Solution:

avg\_wickets = df['Wickets'].mean()

# Problem 19

Identify the match where a player took a hat-trick.

Solution:

hat\_trick\_matches = df[df['Hat Trick'] == 'Yes']

# Problem 20

Find the most common margin of victory (by runs or wickets).

Solution:

common\_victory\_margin = df['Victory Margin'].mode()[0]