

1. Top 5 Players who have scored a century in the most number of matches:

```
PREFIX cricket: <http://cwnamespace.org/cricketOntology#>

SELECT ?player_name (COUNT(DISTINCT ?match) AS ?Centuries)
WHERE {
    ?delivery a cricket:Deliveries ;
        cricket:match ?match ;
        cricket:batsman ?player ;
        cricket:runs ?runs .
    ?player a cricket:Player ;
        cricket:name ?player_name .

    {
        SELECT ?player ?match (SUM(?runs) AS ?totalRuns)
        WHERE {
            ?delivery a cricket:Deliveries ;
                cricket:match ?match ;
                cricket:batsman ?player ;
                cricket:runs ?runs .
        }
        GROUP BY ?player ?match
        HAVING (?totalRuns >= 100)
    }
}

GROUP BY ?player ?player_name
ORDER BY DESC(?Centuries)
LIMIT 5
```

2. Players who have scored the most runs in matches played at a specific venue:

```
PREFIX cricket: <http://cwnamespace.org/cricketOntology#>

SELECT ?player ?playerName ?venue (SUM(?runs) AS ?totalRuns)
WHERE {
    ?delivery a cricket:Deliveries ;
        cricket:batsman ?player ;
        cricket:runs ?runs ;
        cricket:match ?match .

    ?player a cricket:Player ;
        cricket:name ?playerName .

    ?match a cricket:Match ;
        cricket:venue ?venue .
}

GROUP BY ?player ?playerName ?venue
ORDER BY DESC(?totalRuns)
LIMIT 5
```

3. Top 5 Batsmen with respect to their Average Runs Scored:

```
PREFIX cricket: <http://cwnamespace.org/cricketOntology#>

SELECT ?player (AVG(?totalRuns) AS ?battingAverage)
WHERE {
    ?delivery cricket:batsman ?player .
    ?delivery cricket:runs ?runs .

    {
        SELECT ?player ?match (SUM(?runs) AS ?totalRuns)
        WHERE {
```

```

    ?delivery cricket:batsman ?player .
    ?delivery cricket:runs ?runs .
    ?delivery cricket:match ?match.
}
GROUP BY ?player ?match
}
}
GROUP BY ?player
ORDER BY DESC(?battingAverage)
LIMIT 5

```

4. Average number of runs scored in a single match in each city:

```

PREFIX cricket: <http://cwnamespace.org/cricketOntology#>

SELECT ?city (AVG(?totalRuns) AS ?averageRuns)
WHERE {
    ?match rdf:type cricket:Match.
    ?match cricket:city ?city.
    ?delivery rdf:type cricket:Deliveries.
    ?delivery cricket:match ?match.
    ?delivery cricket:runs ?runs.
    {
        SELECT ?city(SUM(?runs) AS ?totalRuns)
        WHERE {
            ?match rdf:type cricket:Match.
            ?match cricket:city ?city.
            ?delivery rdf:type cricket:Deliveries.
            ?delivery cricket:match ?match.
            ?delivery cricket:runs ?runs.

```

```

    }
    GROUP BY ?player ?match ?city
  }
}
GROUP BY ?city

```

5. Find the player who scored the most runs in a single match:

PREFIX cricket: <http://cwnamespace.org/cricketOntology#>

```

SELECT ?player_name ?match_name (SUM(?runs) AS ?totalRuns)
WHERE {
  ?delivery a cricket:Deliveries ;
    cricket:match ?match ;
    cricket:batsman ?player ;
    cricket:runs ?runs .
  ?player a cricket:Player ;
    cricket:name ?player_name .
  ?match a cricket:Match ;
    cricket:match_name ?match_name ;

}
GROUP BY ?match ?player ?match_name ?player_name
ORDER BY DESC(?totalRuns)
LIMIT 1

```

6. Top 3 Players with Most Player of the Match Awards:

PREFIX cricket: <http://cwnamespace.org/cricketOntology#>

```

SELECT ?player (COUNT(?match) AS ?awards)
WHERE {
    ?match cricket:player_of_the_match ?player .
}
GROUP BY ?player
ORDER BY DESC(?awards)
LIMIT 3

```

7. Top 3 highest total runs scored by both team in each match:

PREFIX cricket: <http://cwnamespace.org/cricketOntology#>

```

SELECT ?Match (MAX(?totalRuns) AS ?highestTotalRuns)
WHERE {
    ?match cricket:match_name ?Match .
    ?match cricket:first_inning_score ?runs1 .
    ?match cricket:second_inning_score ?runs2 .
    BIND(?runs1 + ?runs2 AS ?totalRuns)
}
GROUP BY ?Match
ORDER BY DESC(?highestTotalRuns)
LIMIT 3

```

8. Top 5 Wicket Takers

PREFIX cricket: <http://cwnamespace.org/cricketOntology#>

```

SELECT ?bowler (COUNT(?wicket) AS ?wickets)
WHERE {
    ?delivery rdf:type cricket:Deliveries ;
        cricket:bowler ?bowler ;

```

cricket:wicket_type ?wicket .

```
FILTER (BOUND(?wicket) && ?wicket in ("caught","bowled","lbw","stumped","caughtandbowled"))
}
GROUP BY ?bowler
ORDER BY DESC(?wickets)
LIMIT 5
```

9. Team with the highest total runs across all matches while batting first:

```
PREFIX cricket: <http://cwnamespace.org/cricketOntology#>
SELECT ?team (SUM(?runs) AS ?totalRuns)
WHERE {
    ?match rdf:type cricket:Match.
    ?match cricket:team1 ?team.
    ?delivery rdf:type cricket:Deliveries.
    ?delivery cricket:match ?match.
    ?delivery cricket:runs ?runs.
}
GROUP BY ?team
ORDER BY DESC(?totalRuns)
LIMIT 1
```

10. Query for Matches and Their Umpires:

```
SELECT ?match ?matchName ?umpire1 ?umpire2
WHERE {
    ?match a cricket:Match .
    ?match cricket:match_name ?matchName .
    ?match cricket:umpire1 ?umpire1 .
```

?match cricket:umpire2 ?umpire2 .

}