

DATABASE 2 - QUERIES

Query 1: Getting all batting data of specific batsman

PREFIX t20: <http://www.dei.unipd.it/database2/T20WC#>

PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>

```
select ?playername (SUM(?runs) as ?Runs) (AVG(?sr) as ?StrickRate) (SUM(?4s) as ?Four) (SUM(?6s) as ?Six) (SUM(?bf) as ?ballsaced) (AVG(?sr) as ?StrikRate)
```

where {

```
    ?team t20:Batsman ?batsman ;
```

```
        t20:R ?runs;
```

```
        t20:SR ?sr;
```

```
        t20:4s ?4s;
```

```
        t20:6s ?6s;
```

```
        t20:BF ?bf;
```

```
        t20:SR ?sr;
```

```
        t20:Batsman ?playername.
```

```
    FILTER REGEX(?batsman , "Iftikhar Ahmed"^^xsd:string).
```

```
} GROUP BY ?playername
```

The screenshot shows the GraphDB SPARQL Query & Update interface. The query is as follows:

```
1 PREFIX t20: <http://www.dei.unipd.it/database2/T20WC#>
2 PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>
3 select ?playername (SUM(?runs) as ?Runs) (AVG(?sr) as ?StrickRate) (SUM(?4s) as ?Four) (SUM(?6s) as ?Six)
4 (SUM(?bf) as ?ballsaced) (AVG(?sr) as ?StrikRate)
5 where {
6     ?team t20:Batsman ?batsman ;
7         t20:R ?runs;
8         t20:SR ?sr;
9         t20:4s ?4s;
10        t20:6s ?6s;
11        t20:BF ?bf;
12        t20:SR ?sr;
13        t20:Batsman ?playername.
14    FILTER REGEX(?batsman , "Iftikhar Ahmed"^^xsd:string).
15 } GROUP BY ?playername
```

The results are displayed in a table with the following columns: playername, Runs, StrickRate, Four, Six, ballsaced, and StrikRate. The results show one row for Iftikhar Ahmed.

playername	Runs	StrickRate	Four	Six	ballsaced	StrikRate
Iftikhar Ahmed	456	109.97688	32	16	365	109.97688

Query 2: Players with centuries in T20 Matches

PREFIX t20: <http://www.dei.unipd.it/database2/T20WC#>

select ?player ?runss ?bf ?Fours ?sixes

where {

 ?r t20:R ?runs;

 t20:Batsman ?player;

 t20:R ?runss;

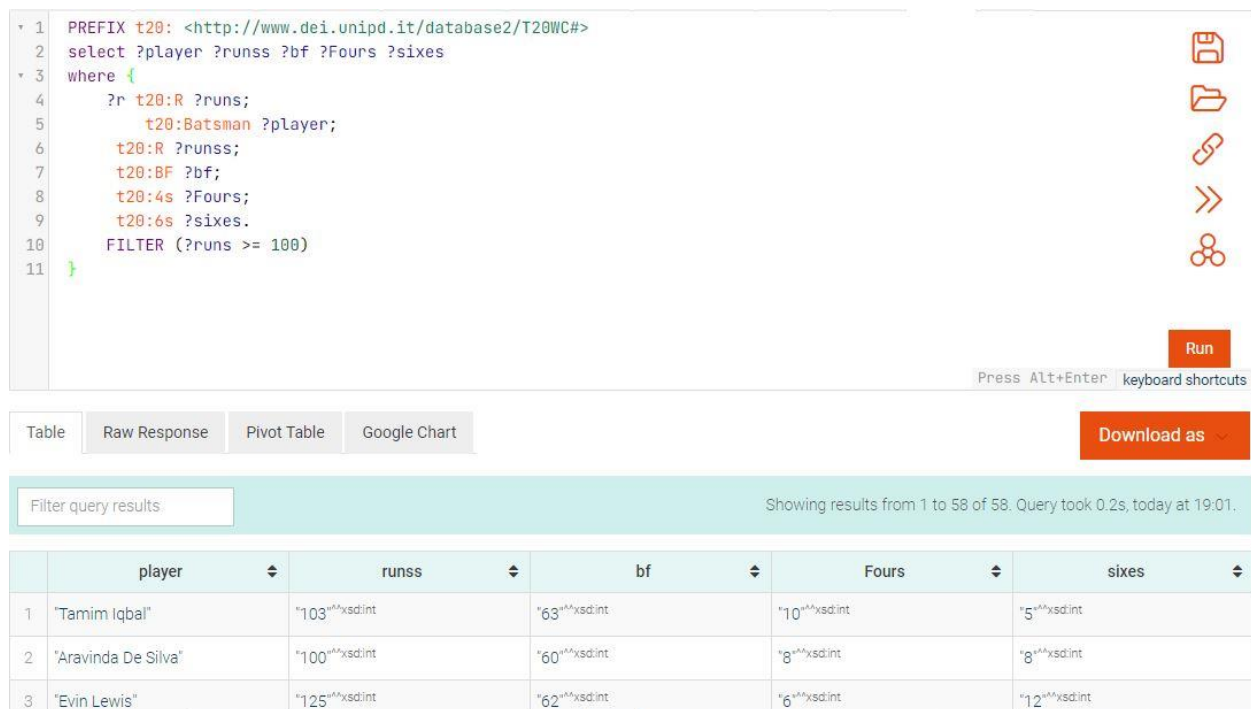
 t20:BF ?bf;

 t20:4s ?Fours;

 t20:6s ?sixes.

FILTER (?runs >= 100)

}



```
1 PREFIX t20: <http://www.dei.unipd.it/database2/T20WC#>
2 select ?player ?runss ?bf ?Fours ?sixes
3 where {
4     ?r t20:R ?runs;
5     t20:Batsman ?player;
6     t20:R ?runss;
7     t20:BF ?bf;
8     t20:4s ?Fours;
9     t20:6s ?sixes.
10    FILTER (?runs >= 100)
11 }
```

Press Alt+Enter keyboard shortcuts

Run

Table Raw Response Pivot Table Google Chart Download as

Filter query results Showing results from 1 to 58 of 58. Query took 0.2s, today at 19:01.

	player	runss	bf	Fours	sixes
1	"Tamim Iqbal"	"103"	"63"	"10"	"5"
2	"Aravinda De Silva"	"100"	"60"	"8"	"8"
3	"Evin Lewis"	"125"	"62"	"6"	"12"

Query 3 : Top 5 Bowlers by wickets

PREFIX t20: <http://www.dei.unipd.it/database2/T20WC#>

select ?bowler_name ?Country (SUM(?wic) as ?Wickets)

where {

 ?teams t20:Wickets ?wic;

 t20:Bowler ?bowler_name;

 t20:bowlingTeam ?Country.

}GROUP BY ?bowler_name ?Country

ORDER BY DESC(?Wickets)

LIMIT 5

```
5 PREFIX t20: <http://www.dei.unipd.it/database2/T20WC#>
6 select ?bowler_name ?Country (SUM(?wic) as ?Wickets)
7 where {
8     ?teams t20:Wickets ?wic;
9     t20:Bowler ?bowler_name;
10    t20:bowlingTeam ?Country.
11
12 }GROUP BY ?bowler_name ?Country
13 ORDER BY DESC(?Wickets)
14 LIMIT 5
```

Run

keyboard shortcuts

Table Raw Response Pivot Table Google Chart Download as

Filter query results Showing results from 1 to 5 of 5. Query took 0.1s, minutes ago.

	bowler_name	Country	Wickets
1	"Shakib Al Hasan"	"Bangladesh"	"122"
2	"Rashid Khan"	"Afghanistan"	"116"
3	"Tim Southee"	"New Zealand"	"114"
4	"Lasith Malinga"	"Sri Lanka"	"107"
5	"Ish Sodhi"	"New Zealand"	"99"

Query 4: Batting Score Card of match on specific date

PREFIX t20: <http://www.dei.unipd.it/database2/T20WC#>

PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>

select ?mid ?batsman ?Run ?team ?Fours ?Sixes ?Bf ?Sr

where {

 ?Runs t20:Match_Date "17th February, 2005"^^xsd:string ;

 t20:MatchId ?mid.

 ?t t20:Match_Id ?mid;

 t20:Batsman ?batsman;

 t20:R ?Run;

 t20:Team ?team;

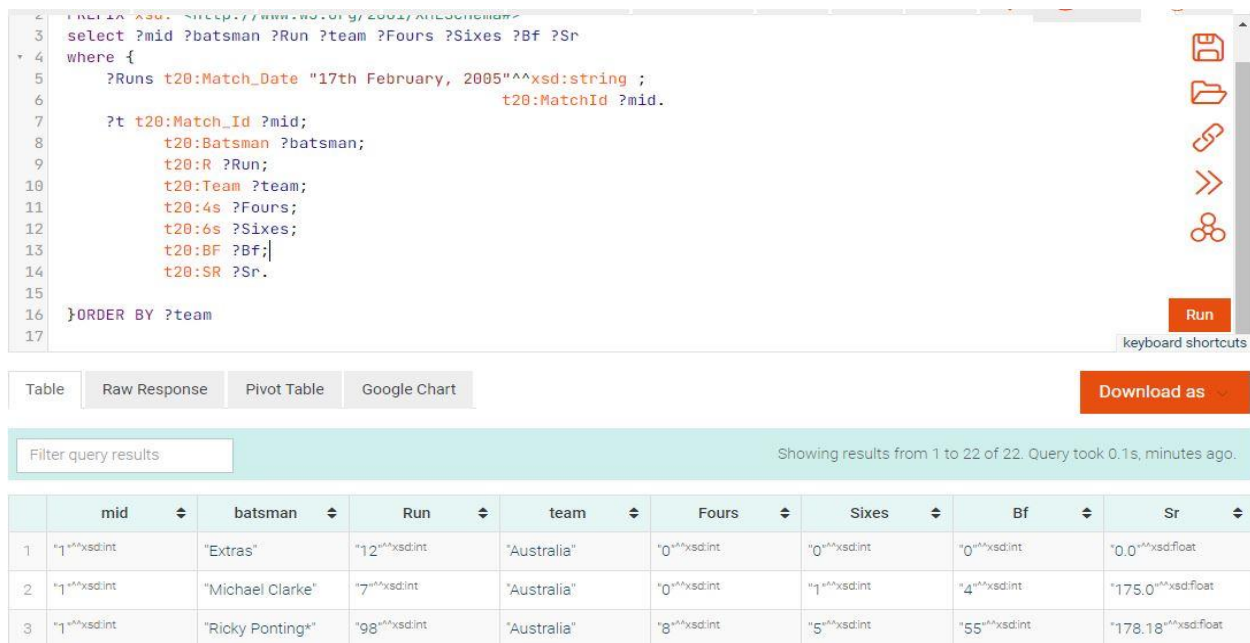
 t20:4s ?Fours;

 t20:6s ?Sixes;

 t20:BF ?Bf;

 t20:SR ?Sr.

}ORDER BY ?team



The screenshot shows a query execution interface. The query is displayed in a text area on the left, and the results are shown in a table below. The table has columns for mid, batsman, Run, team, Fours, Sixes, Bf, and Sr. The results are ordered by team, showing three rows for Australia.

	mid	batsman	Run	team	Fours	Sixes	Bf	Sr
1	"1"^^xsd:int	"Extras"	"12"^^xsd:int	"Australia"	"0"^^xsd:int	"0"^^xsd:int	"0"^^xsd:int	"0.0"^^xsd:float
2	"1"^^xsd:int	"Michael Clarke"	"7"^^xsd:int	"Australia"	"0"^^xsd:int	"1"^^xsd:int	"4"^^xsd:int	"175.0"^^xsd:float
3	"1"^^xsd:int	"Ricky Ponting"	"98"^^xsd:int	"Australia"	"8"^^xsd:int	"5"^^xsd:int	"55"^^xsd:int	"178.18"^^xsd:float

Query 5: Bowling Score Card of specific match

PREFIX t20: <http://www.dei.unipd.it/database2/T20WC#>

PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>

select ?bowler ?er ?maidens ?runs ?BTeam ?wickets

where {

 ?Runs t20:Match_Date "17th February, 2005"^^xsd:string ;

 t20:MatchId ?mid.

 ?t t20:Match_Id ?mid;

 t20:Bowler ?bowler;

 t20:ER ?er;

 t20:Maidens ?maidens;

 t20:Runs ?runs;

 t20:bowlingTeam ?BTeam;

 t20:Wickets ?wickets;

}ORDER BY ?Bteam

1	PREFIX t20: <http://www.dei.unipd.it/database2/T20WC#>					
2	PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>					
3	select ?bowler ?er ?maidens ?runs ?BTeam ?wickets					
4	where {					
5	?Runs t20:Match_Date "17th February, 2005"^^xsd:string ;					
6	t20:MatchId ?mid.					
7	?t t20:Match_Id ?mid;					
8	t20:Bowler ?bowler;					
9	t20:ER ?er;					
10	t20:Maidens ?maidens;					
11	t20:Runs ?runs;					
12	t20:bowlingTeam ?BTeam;					
13	t20:Wickets ?wickets;					
14						
15	}ORDER BY ?Bteam					
16						

TableRaw ResponsePivot TableGoogle ChartDownload as

Filter query resultsShowing results from 1 to 22 of 22. Query took 0.1s, minutes ago.

	bowler	er	maidens	runs	BTeam	wickets
1	"Brett Lee"	"10.33"^^xsd:float	"0"^^xsd:int	"31"^^xsd:int	"Australia"	"0"^^xsd:int
2	"Kyle Mills"	"11.0"^^xsd:float	"0"^^xsd:int	"44"^^xsd:int	"New Zealand"	"3"^^xsd:int
3	"Jeffrey Wilson"	"10.75"^^xsd:float	"0"^^xsd:int	"43"^^xsd:int	"New Zealand"	"0"^^xsd:int
4	"Chris Cairns"	"7.0"^^xsd:float	"0"^^xsd:int	"28"^^xsd:int	"New Zealand"	"1"^^xsd:int

Query 6: Score card of a specific team against every team

PREFIX t20: <http://www.dei.unipd.it/database2/T20WC#>

PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>

```
select ?opo (SUM(?Runss) as ?Runs) (SUM(?Four) as ?Fours) (SUM(?Sixess) as ?Six)
(SUM(?Bfs) as ?BallFaced) (AVG(?Srs) as ?Sr)
```

where {

```
    ?team t20:Team "Pakistan"^^xsd:string;
```

```
    t20:Opponent ?opo;
```

```
    t20:R ?Runss;
```

```
    t20:4s ?Four;
```

```
    t20:6s ?Sixess;
```

```
    t20:BF ?Bfs;
```

```
    t20:SR ?Srs;
```

```
} GROUP BY(?opo)
```

```
1 PREFIX t20: <http://www.dei.unipd.it/database2/T20WC#>
2 PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>
3 select ?opo (SUM(?Runss) as ?Runs) (SUM(?Four) as ?Fours) (SUM(?Sixess) as ?Six) (SUM(?Bfs) as ?BallFaced)
4 (AVG(?Srs) as ?Sr)
5 where {
6     ?team t20:Team "Pakistan"^^xsd:string;
7     t20:Opponent ?opo;
8     t20:R ?Runss;
9     t20:4s ?Four;
10    t20:6s ?Sixess;
11    t20:BF ?Bfs;
12    t20:SR ?Srs;
13 } GROUP BY(?opo)
14
```

Table Raw Response Pivot Table Google Chart Download as

Filter query results Showing results from 1 to 19 of 19. Query took 0.1s, minutes ago.

	opo	Runs	Fours	Six	BallFaced	Sr
1	"West Indies"	"2242"^^xsd:integer	"211"^^xsd:integer	"61"^^xsd:integer	"1748"^^xsd:integer	"68.56155"^^xsd:float
2	"ICC World XI"	"550"^^xsd:integer	"51"^^xsd:integer	"16"^^xsd:integer	"355"^^xsd:integer	"76.514244"^^xsd:float
3	"Bangladesh"	"2028"^^xsd:integer	"174"^^xsd:integer	"66"^^xsd:integer	"1526"^^xsd:integer	"65.45082"^^xsd:float
4	"Sri Lanka"	"2846"^^xsd:integer	"224"^^xsd:integer	"70"^^xsd:integer	"2416"^^xsd:integer	"74.77621"^^xsd:float

```
12 FILTER_REGEX(?batsman,"Iftikhar Ahmed*"^xsd:string).
```

Press Alt+Enter to keyboard shortcuts

Table	Raw Response	Pivot Table	Google Chart
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Filter query results

Showing results from 1 to 10 of 10. Query took 0.2s, minutes ago.

	opo	Runs	Fours	Six	BallFaced	Sr
1	"Sri Lanka"	"87"xsd:integer	"5"xsd:integer	"3"xsd:integer	"80"xsd:integer	"99.274"xsd:float
2	"Australia"	"121"xsd:integer	"12"xsd:integer	"3"xsd:integer	"85"xsd:integer	"125.9925"xsd:float
3	"Bangladesh"	"22"xsd:integer	"2"xsd:integer	"1"xsd:integer	"15"xsd:integer	"141.02667"xsd:float
4	"England"	"88"xsd:integer	"4"xsd:integer	"5"xsd:integer	"68"xsd:integer	"84.86714"xsd:float
5	"New Zealand"	"14"xsd:integer	"1"xsd:integer	"1"xsd:integer	"7"xsd:integer	"200.0"xsd:float
6	"South Africa"	"24"xsd:integer	"2"xsd:integer	"0"xsd:integer	"29"xsd:integer	"72.619995"xsd:float
7	"West Indies"	"40"xsd:integer	"2"xsd:integer	"2"xsd:integer	"25"xsd:integer	"136.14"xsd:float
8	"India"	"30"xsd:integer	"2"xsd:integer	"1"xsd:integer	"23"xsd:integer	"163.635"xsd:float
9	"Hong Kong"	"0"xsd:integer	"0"xsd:integer	"0"xsd:integer	"0"xsd:integer	"0.0"xsd:float
10	"Afghanistan"	"30"xsd:integer	"2"xsd:integer	"0"xsd:integer	"33"xsd:integer	"90.91"xsd:float

Query 8: List of Players with Highest Runs

PREFIX t20: <http://www.dei.unipd.it/database2/T20WC#>

PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>

```
select ?batsman (SUM(?rs) as ?Runs)
```

```
  where {
```

```
    ?v t20:Player_id ?pid;
```

```
    t20:Batsman ?batsman;
```

```
    t20:R ?rs.
```

```
  } GROUP BY (?batsman)
```

```
  Having (?batsman != "Extras")
```

```
  ORDER BY DESC(?Runs)
```

```
  Limit 5
```



The screenshot shows a query editor with a light purple background. The query is written in a monospaced font. On the right side of the editor, there are several icons: a magnifying glass, a document icon labeled 'V6', a folder icon, a link icon, a double arrow icon, and a circular icon. Below the editor, there is a 'Run' button and a link to 'keyboard shortcuts'.

Table Raw Response Pivot Table Google Chart Download as

Filter query results Showing results from 1 to 5 of 5. Query took 0.2s, moments ago.

	batsman	Runs
1	"Martin Guptill"	"5765"^^xsd:integer
2	"David Warner"	"4158"^^xsd:integer
3	"Rohit Sharma"	"4096"^^xsd:integer
4	"Virat Kohli"	"3750"^^xsd:integer
5	"Shoaib Malik"	"3729"^^xsd:integer

Query 9: List of Batsman with Highest Sixes in T20 Career

PREFIX t20: <http://www.dei.unipd.it/database2/T20WC#>

PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>

select ?k ?teams (SUM(?s) as ?d)

where {

 ?t20:Batsman ?k;

 t20:6s ?s;

 t20:Team ?teams

} GROUP BY ?k ?teams

ORDER BY DESC(?d)

LIMIT 10

	k	teams	d
1	"Martin Guptill"	"New Zealand"	"172" ^{xsd:integer}
2	"Evin Lewis"	"West Indies"	"110" ^{xsd:integer}
3	"Colin Munro"	"New Zealand"	"104" ^{xsd:integer}
4	"Rohit Sharma"	"India"	"99" ^{xsd:integer}
5	"Glenn Maxwell"	"Australia"	"99" ^{xsd:integer}
6	"Chris Gayle"	"West Indies"	"99" ^{xsd:integer}
7	"David Warner"	"Australia"	"95" ^{xsd:integer}
8	"Eoin Morgan"	"England"	"85" ^{xsd:integer}
9	"Kevin O'Brien"	"Ireland"	"79" ^{xsd:integer}
10	"David Miller"	"South Africa"	"78" ^{xsd:integer}

Query 10 ; Profile of a specific Bowler

PREFIX so:<http://www.dei.unipd.it/databse2/T20WC>

PREFIX t20: <http://www.dei.unipd.it/database2/T20WC#>

PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>

PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>

```
SELECT ?Player_Name (SUM(?runs) as ?Total_Runs) (SUM(?wi) as ?Total_Wickets)
(SUM(?ov) as ?Total_Overs) (SUM(?md) as ?Total_Maiden_Overs) (AVG(?er) as ?ER)
{
```

```
    ?player t20:Bowler "Umar Gul"^^xsd:string ;
```

```
    t20:Bowler ?Player_Name;
```

```
    t20:Wickets ?wi;
```

```
        t20:Runs ?runs;
```

```
        t20:Overs ?ov;
```

```
        t20:Maidens ?md;
```

```
        t20:ER ?er.
```

```
} GROUP BY (?Player_Name)
```

SPARQL Query & Update

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Editor only Editor and results Results only

Bowler_Profile x Bowling_Team_Profile x Unnamed x

```
2 PREFIX t20: <http://www.dei.unipd.it/database2/T20WC#>
3 PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
4 PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>
5 SELECT ?Player_Name (SUM(?runs) as ?Total_Runs) (SUM(?wi) as ?Total_Wickets) (SUM(?ov) as ?Total_Overs) (SUM(?md) as ?Total_Maiden_Overs) (AVG(?er) as ?ER) {
6     ?player t20:Bowler "Umar Gul"^^xsd:string ;
7     t20:Bowler ?Player_Name;
8     t20:Wickets ?wi;
9     t20:Runs ?runs;
10    t20:Overs ?ov;
11    t20:Maidens ?md;
12    t20:ER ?er.
13 } GROUP BY (?Player_Name)
14
```

Run keyboard shortcuts

Table

Raw Response

Pivot Table

Google Chart

Download as

Filter query results

⚠ Showing results from 1 to 1 of 1. Query took 0.1s, today at 17:59.

	Player_Name	Total_Runs	Total_Wickets	Total_Overs	Total_Maiden_Overs	ER
1	"Umar Gul"	"1425"^^xsd:integer	"85"^^xsd:integer	"197.00002"^^xsd:float	"2"^^xsd:integer	"7.1647453"^^xsd:float