# Cricket team Management System

* **Create tables**

1. create table Player\_details(p\_id int primary key,first\_name varchar(64),last\_name varchar(64),country varchar(32),age numeric(10,2),DOB date,address varchar(64),P\_type varchar(64),debut date);

1. create table Performance(per\_id int primary key,p\_id int,p\_type varchar(32),matches int,t\_runs int,p\_ball int,bat\_avg numeric(10,2),str numeric(10,2), centurys int,fiftys int,sixes int ,fours int,wickets int,b\_over numeric(10,2),b\_ball int,g\_run int,eco numeric(10,2),b\_avg numeric(10,2),constraint f\_key foreign key (p\_id) references player\_details(p\_id));

1. create table test(per\_id int , matches int ,runs int ,p\_ball int ,bat\_avg numeric(10,2),str numeric(10,2) ,centurys int,fiftys int,sixes int,fours int ,wicket int, b\_over numeric(10,2),b\_ball int,g\_run int ,eco numeric (10,2) ,b\_avg numeric (10,2) ,constraint f\_key foreign key (per\_id) references performance (per\_id));

1. create table T20(per\_id int , matches int ,runs int ,p\_ball int ,bat\_avg numeric(10,2),str numeric(10,2) ,centurys int,fiftys int, sixes int,fours int ,wicket int, b\_over numeric(10,2),b\_ball int,g\_run int ,eco numeric (10,2) ,b\_avg numeric (10,2), constraint f\_key foreign key (per\_id) references performance (per\_id));

1. create table ODI(per\_id int , matches int ,runs int ,p\_ball int ,bat\_avg numeric(10,2),str numeric(10,2) ,centurys int,fiftys int,sixes int,fours int ,wicket int, b\_over numeric(10,2),b\_ball int,g\_run int ,eco numeric (10,2) ,b\_avg numeric (10,2), constraint f\_key foreign key (per\_id) references performance (per\_id));

* **Create Procedure For Insert**

1. **insertDetail:**

create or replace procedure insertDetail(id int,per\_id int,f\_name varchar(64),

l\_name varchar(64),country varchar(32),age numeric(10,2),dob date,

address varchar(64),p\_type varchar(64),debut date)

as

$$

begin

insert into player\_details values (id,f\_name,l\_name,country, age, dob,address,p\_type,debut);

insert into performance values(per\_id,id,p\_type,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0);

end;

$$

language plpgsql;

1. **insertTestData:**

create or replace Procedure insertTestData(per\_id int,matches int,run int,p\_ball int, centurey int,fifty int,six int,four int,wicket int,b\_ball int,g\_run int)

as

$$

declare

bat\_avg test.bat\_avg%type:=0;

str test.str%type:=0;

eco test.eco%type:=0;

b\_avg test.b\_avg%type:=0;

b\_over numeric(10,2):=0;

begin

bat\_avg=(run\*1.0)/matches;

if p\_ball!=0 then

str=run\*100.0/p\_ball;

end if;

b\_over=b\_ball/6.0;

if b\_over!=0 then

eco=g\_run/b\_over;

end if;

if wicket!=0 then

b\_avg=g\_run/(wicket\*1.0);

else

b\_avg=0;

end if;

insert into test values(per\_id,matches,run, p\_ball,bat\_avg,str, centurey ,fifty, six,four, wicket,b\_over,b\_ball,g\_run,eco,b\_avg);

end;

$$

language plpgsql;

1. **insertODIData:**

create or replace Procedure insertOdiData(per\_id int,matches int,run int,p\_ball int, centurey int,fifty int,six int,four int,wicket int,b\_ball int,g\_run int)

as

$$

declare

bat\_avg odi.bat\_avg%type;

str odi.str%type;

eco odi.eco%type;

b\_avg odi.b\_avg%type;

b\_over numeric(10,2);

begin

bat\_avg=(run\*1.0)/matches;

if p\_ball!=0 then

str=run\*100.0/p\_ball;

end if;

b\_over=b\_ball/6.0;

if b\_over!=0 then

eco=g\_run/b\_over;

end if;

if wicket!=0 then

b\_avg=g\_run/(wicket\*1.0);

else

b\_avg=0;

end if;

insert into odi values (per\_id,matches,run,p\_ball,bat\_avg,str,centurey,fifty,six, four,wicket,b\_over,b\_ball,g\_run,eco,b\_avg);

end;

$$

language plpgsql;

**4.insertT20Data:**

create or replace Procedure insertT20Data(per\_id int,matches int,run int,p\_ball int, centurey int,fifty int,six int,four int,wicket int,b\_ball int,g\_run int)

as

$$

declare

bat\_avg t20.bat\_avg%type;

str t20.str%type;

eco t20.eco%type;

b\_avg t20.b\_avg%type;

b\_over numeric(10,2);

begin

bat\_avg=(run\*1.0)/matches;

if p\_ball!=0 then

str=run\*100.0/p\_ball;

end if;

b\_over=b\_ball/6.0;

if b\_over!=0 then

eco=g\_run/b\_over;

end if;

if wicket!=0 then

b\_avg=g\_run/(wicket\*1.0);

else

b\_avg=0;

end if;

insert into t20 values (per\_id,matches,run,p\_ball,bat\_avg,str,centurey,fifty,six, four,wicket,b\_over,b\_ball,g\_run,eco,b\_avg);

end;

$$

language plpgsql;

**5.Trigger Function:**

**->insertion time trigger function to update data in performance table.**

create or replace function trigger\_updateData() returns Trigger

as

$$

declare

ba\_avg performance.bat\_avg%type:=0;

sr performance.str%type:=0;

ec performance.eco%type:=0;

bowl\_avg performance.b\_avg%type:=0;

match int;

run int;

w int;

pball int;

grun int;

bball int;

c\_cursor cursor for select matches,t\_runs,p\_ball,wickets,b\_ball,g\_run from performance where per\_id=new.per\_id;

begin

update performance set

matches=performance.matches+new.matches,

t\_runs=performance.t\_runs+new.runs,

p\_ball=performance.p\_ball+new.p\_ball,

centurys=performance.centurys+new.centurys,

fiftys=performance.fiftys+new.fiftys,

sixes=performance.sixes+new.sixes,

fours=performance.fours+new.fours,

wickets=performance.wickets+new.wicket,

b\_over=performance.b\_over+new.b\_over,

b\_ball=performance.b\_ball+new.b\_ball,

g\_run=performance.g\_run+new.g\_run

where per\_id=new.per\_id;

open c\_cursor;

loop

fetch c\_cursor into match,run,pball,w,bball,grun;

exit when not found;

ba\_avg=(run\*1.0)/match;

if pball!=0 then

sr=run\*100.0/pball;

end if;

if bball!=0 then

ec=(grun\*6.0)/bball;

end if;

if w!=0 then

bowl\_avg=grun/(w\*1.0);

end if;

update performance set bat\_avg=ba\_avg,str=sr,eco=ec, b\_avg=bowl\_avg where per\_id=new.per\_id;

end loop;

close c\_cursor;

return new;

end;

$$

language plpgsql;

* **Inserting Data Into Tables**
* **Insert Player Details**

1. Call insertDetail(1,101,'Rohit','Sharma','India',36,'1987-0330','Mumbai','Batsman',

'2007-06-23');

1. call insertDetail(2,102,'Virat','Kohli','India',34,'1988-11-05','Delhi','Batsman',

'2008-08-18');

1. call insertDetail(3,103,'Subhuman’,'Gill','India',24,'1999-09-08','Punjab','Batsman',

'2019-01-31');

1. call insertDetail(4,104,'KL','Rahul','India',31,'1992-03-18','Karnataka','Wicketkeeper',

'2014-12-26');

1. call insertDetail(5,105,'Shreyas','Iyer','India',28,'1994-12-06','Mumbai','Batsman',

'2017-11-01');

1. call insertDetail(6,106,'Ishan','Kishan','India',25,'1998-07-18','Patana','Wicketkeeper',

'2021-03-14');

1. call insertDetail(7,107,'SuryaKumar','Yadav','India',33,'1990-09-14','Mumbai','Batsman',

'2021-03-14');

1. call insertDetail(8,108,'Hardik','Pandya','India',29,'1993-10-11','Gujarat,'AllRounder',

'2016-01-26');

1. call insertDetail(9,109,'Ravindra','Jadeja','India',34,'1988-12-06','Gujarat,'AllRounder',

'2009-02-08');

1. call insertDetail(10,110,'Ashwin','Ravichandran','India',37,'1986-09-17','Madras',

'AllRounder','2010-06-05');

1. call insertDetail(11,111,'Siraj','Mohammed','India',29,'1994-03-13','Hyderabad','Bowler', '2017-11-04');
2. call insertDetail(12,112,'Jasprit','Bumrah','India',29,'1993-12-06','Gujarat,'Bowler', '2016-01-23');
3. call insertDetail(13,113,'Shami','Mohammed','India',33,'1990-09-03','Uttar Pradesh', 'Bowler','2013-01-06');
4. call insertDetail(14,114,'Ruturaj','Gaikwad','India',26,'1997-01-31','Maharastra', 'Batsman','2021-07-28');
5. call insertDetail(15,115,'Yasasvi','Jaiswal','India',21,'2001-12-28','Uttar Pradesh', 'Batsman','2023-08-08');
6. call insertDetail(16,116,'Rahul','Tripathi','India',32,'1991-03-02','Jarkhand','Batsman', '2023-01-10');
7. call insertDetail(17,117,'Tilak','Verma','India',20,'2002-11-08','Aandhra Pradesh', 'Batsman','2023-08-03');
8. call insertDetail(18,118,'Rinku','Singh','India',25,'1997-10-12','Uttar Pradesh','Batsman', '2023-08-18');
9. call insertDetail(19,119,'Shivam','Dube','India',30,'1993-06-26','Mumbai','AllRounder', '2019-11-03');
10. call insertDetail(20,120,'Axar','Patel','India',29,'1994-01-20','Gujarat,'AllRounder', '2014-06-15');
11. call insertDetail(21,121,'Sundar','Washington','India',24,'1999-10-05','Tamilnadu', 'AllRounder','2017-12-13');
12. call insertDetail(22,122,'Avesh','Khan','India',26,'1996-12-13','Madhya Pradesh','Bowler', '2022-02-20');
13. call insertDetail(23,123,'Shikhar','Dhavan','India',37,'1985-12-05','Delhi','Batsman',

'2010-10-20');

1. call insertDetail(24,124,'Shardul','Thakur','India',31,'1991-10-16','Maharastra','Bowler', '2017-08-31');
2. call insertDetail(25,125,'Dipak','Chahar','India',31,'1992-08-07','Uttar Pradesh','Bowler', '2018-07-08');
3. call insertDetail(26,126,'Arshdeep','Singh','India',24,'1999-02-05','Madhya Pradesh', 'Bowler','2022-07-07');
4. call insertDetail(27,127,'Bhuvneshwar','Kumar','India',33,'1990-02-05','Uttar Pradesh', 'Bowler','2012-12-25');
5. call insertDetail(28,128,'Ajinkya','Rahane','India',35,'1988-06-06','Maharastra','Batsman', '2013-03-22');
6. call insertDetail(29,129,'Jaydev','Unadkat','India',31,'1991-10-18','Gujarat,'Bowler', '2010-12-16');
7. call insertDetail(30,130,'Krunal','Pandya','India',32,'1991-03-24','Gujarat,'AllRounder', '2018-11-04');
8. call insertDetail(31,131,'Rishabh','pant','India',25,'1997-10-04','Uttarakhand', 'Wicketkeeper','2017-02-01');
9. call insertDetail(32,132,'Yuzvendra','chahal','India',33,'1990-07-23','Haryana','Bowler', '2016-06-11');
10. call insertDetail(33,133,'Piyush','Chawla','India',34,'1988-12-24','Uttar Pradesh','Bowler', '2006-03-09');
11. call insertDetail(34,134,'Dinesh ','Karthik','India',38,'1985-06-01','Tamilnadu', 'Wicketkeeper','2004-10-12');
12. call insertDetail(35,135,'Nitish','Rana','India',29,'1993-12-27','Delhi','Batsman', '2021-07-23');
13. call insertDetail(36,136,'Wriddhiman','saha','India',38,'1984-10-24','Bengal', 'Wicketkeeper','2010-02-06');
14. call insertDetail(37,137,'Umran', 'Malik','India',23,'1999-11-22','Jammu Kashmir', 'Bowler','2022-06-26');
15. call insertDetail(38,138,'Mohit','Sharma','India',35,'1988-09-18','Haryana','Bowler', '2013-08-01');
16. call insertDetail(39,139,'Vijay','Shankar','India',32,'1991-01-26','Tamilnadu','AllRounder', '2018-03-06');
17. call insertDetail(40,140,'Mayank','Agarwal','India',32,'1991-02-16','Banglore','Batsman', '2018-12-26');

* **Insert Test Data:**

1. call insertTestData(101,52,3677,6534,10,16,77,394,2,383,224);
2. call insertTestData(102,111,8676,15708,29,29,24,966,0,175,84);
3. call insertTestData(103,18,966,1638,2,4,13,112,0,7,1);
4. call insertTestData(104,47,2642,5116,7,13,18,318,0,0,0);
5. call insertTestData(105,10,666,1012,1,5,14,80,0,6,2);
6. call insertTestData(106,2,78,91,0,1,2,8,0,0,0);
7. call insertTestData(107,1,8,20,0,0,0,1,0,0,0);
8. call insertTestData(108,11,532,720,1,4,12,68,17,937,528);
9. call insertTestData(109,67,2804,4915,3,19,58,283,275,16354,6620);
10. call insertTestData(110,94,3185,5832,5,14,20,365,489,25113,11569);
11. call insertTestData(111,21,80,190,0,0,2,9,59,3275,1784);
12. call insertTestData(112,30,212,455,0,0,6,24,128,6268,2815);
13. call insertTestData(113,64,750,1005,0,2,25,83,229,11515,6346);
14. call insertTestData(115,2,266,491,1,1,3,29,0,0,0);
15. call insertTestData(120,12,513,958,0,4,17,50,50,2258,858);
16. call insertTestData(121,4,265,502,0,3,5,31,6,526,299);
17. call insertTestData(123,34,2315,3458,7,5,12,316,0,54,18);
18. call insertTestData(124,10,305,481,0,4,9,38,30,1335,779);
19. call insertTestData(127,21,552,1225,0,3,1,77,63,3348,1644);
20. call insertTestData(128,85,5077,10256,12,26,35,578,0,0,0);
21. call insertTestData(129,4,36,89,0,0,1,2,3,474,231);
22. call insertTestData(131,33,2271,3084,5,11,55,246,0,0,0);
23. call insertTestData(133,3,6,23,0,0,0,1,7,492,270);
24. call insertTestData(134,26,1025,2080,1,7,4,134,0,0,0);
25. call insertTestData(136,40,1353,2973,3,6,14,129,0,0,0);
26. call insertTestData(140,21,1488,2782,4,6,28,189,0,0,0);

* **Insert ODI Data:**

1. call insertOdiData(101,251,10112,11170,30,52,292,928,8,593,515);
2. call insertOdiData(102,281,13083,13950,47,66,143,1226,4,642,665);
3. call insertOdiData(103,35,1917,1864,6,9,40,213,0,0,0);
4. call insertOdiData(104,61,2291,2614,6,15,52,177,0,0,0);
5. call insertOdiData(105,47,1801,1840,3,14,37,176,0,37,39);
6. call insertOdiData(106,25,886,865,1,7,31,90,0,0,0);
7. call insertOdiData(107,30,667,631,0,4,18,68,0,0,0);
8. call insertOdiData(108,82,1758,1595,0,11,66,132,79,3100,2847);
9. call insertOdiData(109,186,2636,3122,0,13,51,192,204,9189,7538);
10. call insertOdiData(110,115,707,813,0,1,7,60,155,6243,5164);
11. call insertOdiData(111,30,37,92,0,0,0,2,54,1330,1081);
12. call insertOdiData(112,78,73,130,0,0,1,9,129,4029,3136);
13. call insertOdiData(113,94,210,245,0,0,9,16,171,4692,4361);
14. call insertOdiData(114,4,106,145,0,1,0,14,0,0,0);
15. call insertOdiData(117,1,5,9,0,0,0,1,0,24,21);
16. call insertOdiData(119,1,9,6,0,0,0,1,0,47,68);
17. call insertOdiData(120,54,481,473,0,2,24,21,59,2511,1902);
18. call insertOdiData(121,18,251,302,0,1,7,18,16,576,483);
19. call insertOdiData(122,5,13,18,0,0,0,2,3,213,214);
20. call insertOdiData(123,167,6793,7436,17,39,79,842,0,0,0);
21. call insertOdiData(124,44,329,313,0,1,9,31,63,1838,1912);
22. call insertOdiData(125,13,203,207,0,2,8,17,16,510,489);
23. call insertOdiData(126,3,9,9,0,0,1,0,0,79,89);
24. call insertOdiData(127,121,552,747,0,1,8,46,141,5847,4951);
25. call insertOdiData(128,90,2962,3767,3,24,33,293,0,0,0);
26. call insertOdiData(129,8,0,0,0,0,0,0,9,342,225);
27. call insertOdiData(130,5,130,128,0,1,2,11,2,228,223);
28. call insertOdiData(131,30,865,811,1,5,26,90,0,0,0);
29. call insertOdiData(132,72,77,141,0,0,0,8,121,3739,3283);
30. call insertOdiData(133,25,38,58,0,0,0,3,32,1312,1117);
31. call insertOdiData(134,94,1752,2392,0,9,15,176,0,0,0);
32. call insertOdiData(135,1,7,14,0,0,0,0,0,18,10);
33. call insertOdiData(136,9,41,56,0,0,0,5,0,0,0);
34. call insertOdiData(137,10,2,11,0,0,0,0,13,366,399);
35. call insertOdiData(138,26,31,66,0,0,0,5,31,1121,1020);
36. call insertOdiData(139,12,223,246,0,0,4,20,4,233,210);
37. call insertOdiData(140,5,86,83,0,0,1,12,0,6,10);

* **Insert T20 Data:**

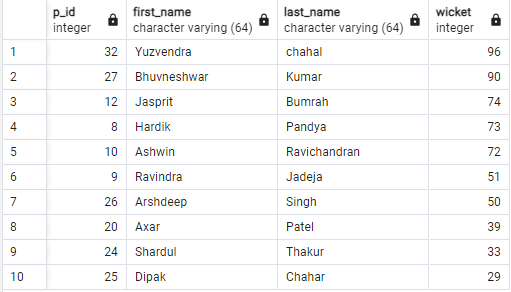
1. call insertT20Data(101,148,3853,2767,4,29,182,348,1,68,113);
2. call insertT20Data(102,115,4008,2905,1,37,117,356,4,152,204);
3. call insertT20Data(103,11,304,207,1,1,16,24,0,0,0);
4. call insertT20Data(104,72,2265,1628,2,22,99,191,0,0,0);
5. call insertT20Data(105,49,1043,767,0,7,42,85,0,2,2);
6. call insertT20Data(106,29,686,564,0,4,27,74,0,0,0);
7. call insertT20Data(107,53,1841,1066,3,15,104,166,0,0,0);
8. call insertT20Data(108,92,1348,964,0,3,69,96,73,1433,1950);
9. call insertT20Data(109,64,457,367,0,0,12,34,51,1237,1453);
10. call insertT20Data(110,65,184,160,0,0,4,17,72,1452,1672);
11. call insertT20Data(111,8,5,7,0,0,0,1,11,192,294);
12. call insertT20Data(112,62,8,13,0,0,0,1,74,1331,1455);
13. call insertT20Data(113,23,0,0,0,0,0,0,24,477,711);
14. call insertT20Data(114,11,212,168,0,2,7,20,0,0,0);
15. call insertT20Data(115,5,132,91,0,1,5,17,0,6,11);
16. call insertT20Data(116,5,97,67,0,0,5,11,0,0,0);
17. call insertT20Data(117,7,174,126,0,1,7,15,1,12,17);
18. call insertT20Data(118,2,38,21,0,0,3,2,0,0,0);
19. call insertT20Data(119,15,127,93,0,1,8,7,5,147,240);
20. call insertT20Data(120,45,328,222,0,1,15,25,39,811,1022);
21. call insertT20Data(121,37,107,71,0,1,6,10,29,705,851);
22. call insertT20Data(122,15,10,7,0,0,1,0,13,278,422);
23. call insertT20Data(123,68,1759,1392,0,11,50,191,0,0,0);
24. call insertT20Data(124,25,69,38,0,0,4,5,33,506,772);
25. call insertT20Data(125,24,53,26,0,0,4,4,29,516,703);
26. call insertT20Data(126,33,32,24,0,0,1,3,50,671,949);
27. call insertT20Data(127,87,67,94,0,0,0,0,90,1791,2079);
28. call insertT20Data(128,20,375,331,0,1,6,32,0,0,0);
29. call insertT20Data(129,10,0,0,0,0,0,0,14,208,301);
30. call insertT20Data(130,19,124,95,0,0,6,8,15,410,554);
31. call insertT20Data(131,66,987,781,0,3,37,86,0,0,0);
32. call insertT20Data(132,80,6,13,0,0,0,0,96,1764,2409);
33. call insertT20Data(133,7,0,1,0,0,0,0,4,138,151);
34. call insertT20Data(134,60,686,481,0,1,28,71,0,0,0);
35. call insertT20Data(135,2,15,27,0,0,0,0,0,0,0);
36. call insertT20Data(137,8,5,2,0,0,0,1,11,143,243);
37. call insertT20Data(138,8,3,7,0,0,0,0,6,138,185);
38. call insertT20Data(139,9,101,73,0,0,5,11,5,126,191);

* **Query:**

1. **Find the top 10 T20 Format Wicket takers:**

select pd.p\_id,pd.first\_name,pd.last\_name,t20.wicket from player\_details as pd inner join performance as p on pd.p\_id=p.p\_id inner join T20 as t20 on p.per\_id=t20.per\_id order by wicket desc limit 10;

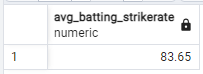
Result:



1. **Find Average Batting StrikeRate of Players in ODI**

select trunc(Avg(str),2) as Avg\_Batting\_StrikeRate from odi;

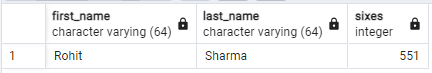
Result:



1. **Display The Name of Player Who Hit Maximum Sixes In all Format**

select pd.first\_name,pd.last\_name,p.sixes from Player\_details as pd inner join Performance as p on pd.p\_id=p.p\_id where p.sixes In (select max(sixes) from performance);

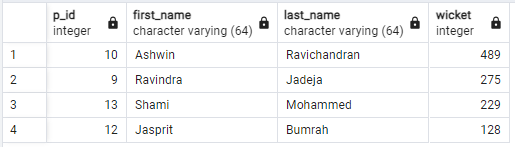
Result:



1. **Find the Player who have taken more then 100 Test Wicket**

select pd.p\_id,pd.first\_name,pd.last\_name,t.wicket from player\_details as pd inner join performance as p on pd.p\_id=p.p\_id inner join Test as t on p.per\_id=t.per\_id where wicket>100 order by wicket desc;

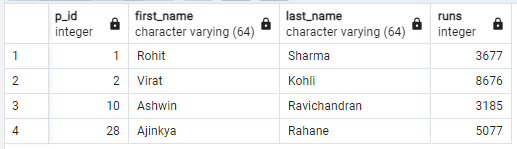
Result:



1. **Find all Players who Have Scored more then 3000 runs in Test**

select pd.p\_id,pd.first\_name,pd.last\_name,t.runs from player\_details as pd inner join performance as p on pd.p\_id=p.p\_id inner join Test as t on p.per\_id=t.per\_id where t.runs>3000;

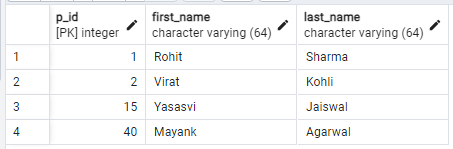
Result:



1. **Find the top 4 players who have highest Bating average in Test Format**

select p\_id ,first\_name,last\_name from player\_details where p\_id in(select p\_id from performance as p inner join Test as t on p.per\_id=t.per\_id order by t.bat\_avg desc limit 4);

Result:



1. **Find The Players with The Best bowling Average in ODI Format**

select pd.p\_id,pd.first\_name,pd.last\_name,o.bat\_avg from player\_details as pd inner join performance as p on pd.p\_id=p.p\_id inner join odi as o on p.per\_id=o.per\_id order by bat\_avg desc limit 1;

Result:

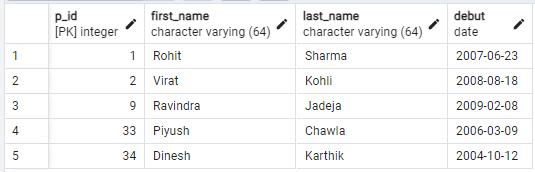


1. **Display Name of Player who Debut Before 01-01-2010**

select p\_id,first\_name,last\_name,debut from player\_details where

debut<'2010-01-01';

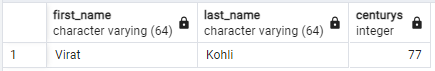
Result:



1. **Find The Player Who Have highest Total Centurey s in All Format**

select pd.first\_name,pd.last\_name ,p.centurys from player\_details as pd inner join performance as p on pd.p\_id=p.p\_id where p.centurys in (select max(centurys) from performance);

Result:



1. **Display top 3 All Rounder in All Format By Their bating Average,Bowling Average**

select p\_id,first\_name,last\_name from player\_details where p\_id in (select p\_id from performance order by bat\_avg,b\_avg desc limit 3);

Result:

