

SQL Assignment 2

1. write a SQL query to find the salesperson and customer who reside in the same city
Return Salesman, cust_name and city

Query :

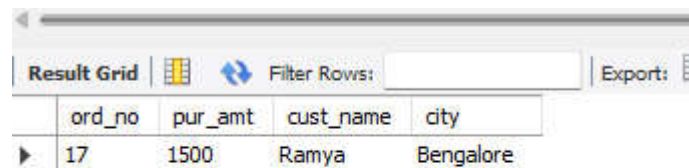
```
SELECT salesman.name,customer.cust_name,customer.city FROM  
customer INNER JOIN salesman ON salesman.city = customer.city;
```

	name	cust_name	city
▶	Prokta	Bhargav	Mysore
	Priya	Ramesh	Delhi
	Priya	Ramesh	Delhi
	Prasanna	Ramya	Bengalore
	Pooja	Rajesh	Hubli
	Prasanna	Bhavya	Bengalore
	Priya	Suresh	Delhi
	Priya	Suresh	Delhi

2. write a SQL query to find those orders where the order amount exists between 500 and 2000. Return ord_no, purch_amt, cust_name, city.

Query :

```
select orders.ord_no,orders.pur_amt,customer.cust_name,customer.city from  
orders inner join customer on orders.customer_id= customer.customer_id  
where orders.pur_amt between 500 and 2000;
```



The screenshot shows a database interface with a 'Result Grid' tab. It contains a table with four columns: 'ord_no', 'pur_amt', 'cust_name', and 'city'. There is one data row with the values 17, 1500, Ramya, and Bengalore. Above the table, there is a 'Filter Rows:' input field and an 'Export:' button.

ord_no	pur_amt	cust_name	city
17	1500	Ramya	Bengalore

3. write a SQL query to find the salesperson(s) and the customer(s) he represents. Return Customer Name, city, Salesman, commission

Query :

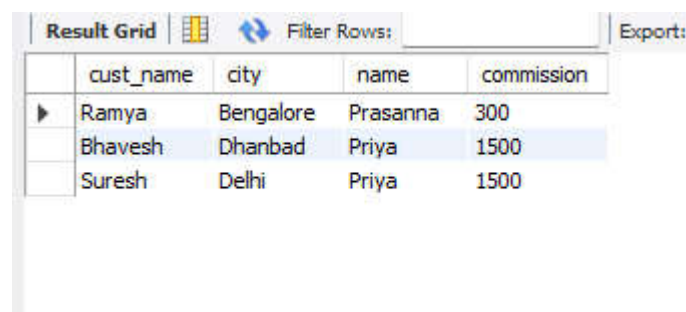
```
select c.cust_name,c.city, s.name,s.commission from customer as c inner join  
salesman as s on s.salesman_id=c.salesman_id;
```

	cust_name	city	name	commission
►	Bhargav	Mysore	Prokta	200.2
	Ramesh	Delhi	Arth	2000
	Ramya	Bengalore	Prasanna	300
	Rajesh	Hubli	Prajwal	100
	Bhavya	Bengalore	Prokta	200.2
	Ravi	Mangalore	Pooja	500.5
	Rajdeep	Belagavi	Prokta	200.2
	Bhaves	Dhanbad	Priya	1500
	Suresh	Delhi	Priya	1500
	Raghu	Dharavadi	Prajwal	100
	ram	Gurugram	Priya	1500

4. write a SQL query to find salespeople who received commissions of more than 12 percent from the company. Return Customer Name, customer city, Salesman,commission.

Query :

```
select customer.cust_name,customer.city,salesman.name,salesman.commission
from salesman,customer,orders where
salesman.commission/orders.pur_amt>0.12 and
salesman.salesman_id=customer.salesman_id and
orders.customer_id=customer.customer_id;
```



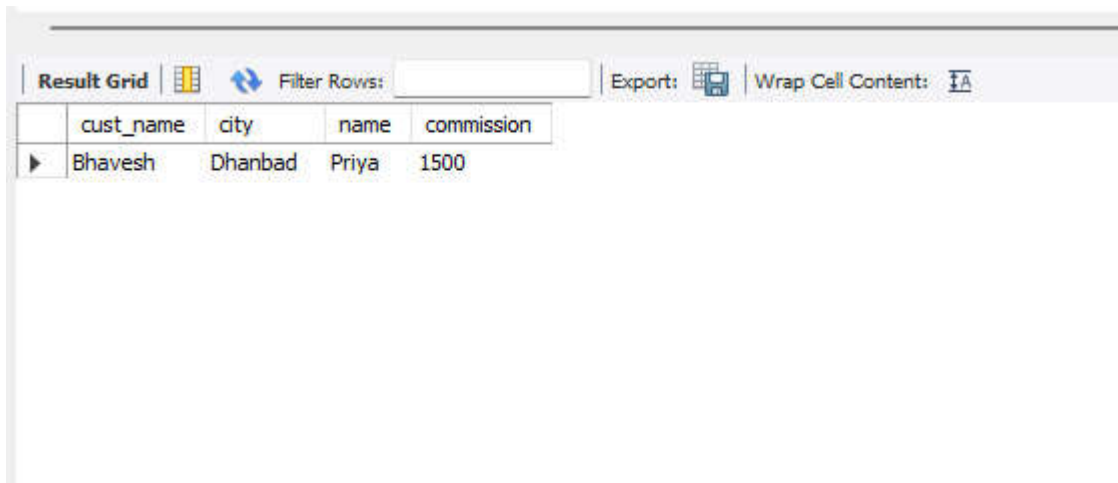
The screenshot shows a database interface with a 'Result Grid' tab. It contains a table with 5 columns: 'cust_name', 'city', 'name', and 'commission'. There are three data rows. The first row shows 'Ramya' from 'Bengalore' with salesman 'Prasanna' and a commission of 300. The second row shows 'Bhavesh' from 'Dhanbad' with salesman 'Priya' and a commission of 1500. The third row shows 'Suresh' from 'Delhi' with salesman 'Priya' and a commission of 1500. The interface also includes a 'Filter Rows:' button and an 'Export:' button.

	cust_name	city	name	commission
▶	Ramya	Bengalore	Prasanna	300
	Bhavesh	Dhanbad	Priya	1500
	Suresh	Delhi	Priya	1500

5. write a SQL query to locate those salespeople who do not live in the same city where their customers live and have received a commission of more than 12% from the company. Return Customer Name, customer city, Salesman, salesman city, commission.

Query :

```
select customer.cust_name,customer.city,salesman.name,salesman.commission
from salesman,customer,orders where
salesman.commission/orders.pur_amt>0.12 and
salesman.salesman_id=customer.salesman_id and
orders.customer_id=customer.customer_id and customer.city!=salesman.city;
```



The screenshot shows a database query result grid. At the top, there is a toolbar with buttons for 'Result Grid', 'Filter Rows', 'Export', and 'Wrap Cell Content'. Below the toolbar is a table with the following data:

	cust_name	city	name	commission
▶	Bhavesh	Dhanbad	Priya	1500

6. write a SQL query to find the details of an order. Return ord_no, ord_date, purch_amt, Customer Name, grade, Salesman, commission.

Query :


```
select o.ord_no,o.ord_date,o.pur_amt,c.cust_name,c.grade,s.name,s.commission
from orders as o inner join salesman as s on s.salesman_id=o.salesman_id
inner join customer as c on c.customer_id=o.customer_id;
```

Result Grid							
		Filter Rows:		Export:		Wrap Cell Content:	
	ord_no	ord_date	pur_amt	cust_name	grade	name	commission
▶	5	2020-03-25	10000	Bhargav	1	Pranav	200
	7	2020-04-30	9500	Rajesh	2	Pooja	500.5
	10	2020-03-25	5000	Rajdeep	3	Prokta	200.2
	11	2020-07-07	8700	Ravi	5	Prasanna	300
	17	2020-07-07	1500	Ramya	3	Prajwal	100
	21	2020-07-08	5000	Rajdeep	3	Arth	2000
	23	2020-09-04	4200	Bhavesh	3	Priya	1500
	24	2020-10-05	3500	Suresh	4	Priya	1500
	25	2020-10-30	2500	Rajesh	2	Pooja	500.5

7. Write a SQL statement to join the tables salesman, customer and orders so that the same column of each table appears once and only the relational rows are returned.

Query :

```
select * from orders natural join customer natural join salesman;
```

Result Grid  Filter Rows: <input type="text"/> Export:  Wrap Cell Content: 										
	salesman_id	city	customer_id	ord_no	pur_amt	ord_date	cust_name	grade	name	commission
▶	61	Delhi	497	24	3500	2020-10-05	Suresh	4	Priya	1500

8. write a SQL query to display the customer name, customer city, grade, salesman, salesman city. The results should be sorted by ascending customer_id.

Query :

```
select c.cust_name,c.city,c.grade,s.name,s.city from customer as c inner join  
salesman as s on s.salesman_id=c.salesman_id order by c.customer_id;
```

Result Grid					
Filter Rows:					
Export:					
Wrap Cell Content:					
	cust_name	city	grade	name	city
►	Bhargav	Mysore	1	Prokta	Mysore
	Ramesh	Delhi	2	Arth	Ahmedabad
	Ramya	Bengalore	3	Prasanna	Bengalore
	Rajesh	Hubli	2	Prajwal	Kodagu
	Bhavya	Bengalore	1	Prokta	Mysore
	Ravi	Mangalore	5	Pooja	Hubli
	Rajdeep	Belagavi	3	Prokta	Mysore
	Bhaves	Dhanbad	3	Priya	Delhi
	Suresh	Delhi	4	Priya	Delhi
	Raghu	Dharavadi	4	Prajwal	Kodagu
	ram	Gurugram	3	Priya	Chennai

9. write a SQL query to find those customers with a grade less than 300. Return cust_name, customer city, grade, Salesman, salesmancity. The result should be ordered by ascending customer_id.

Query :


```
SELECT c.cust_name,c.city,c.grade,s.name as 'Salesman name',s.city FROM  
customer as c LEFT JOIN salesman as s ON s.salesman_id = c.salesman_id  
where c.grade<3 order by c.customer_id;
```

Result Grid					
		Filter Rows:		Export:	Wrap
	cust_name	city	grade	Salesman name	city
▶	Bhargav	Mysore	1	Prokta	Mysore
	Ramesh	Delhi	2	Arth	Ahmedabad
	Rajesh	Hubli	2	Prajwal	Kodagu
	Bhavya	Bengalore	1	Prokta	Mysore

10. Write a SQL statement to make a report with customer name, city, order number, order date, and order amount in ascending order according to the order date to determine whether any of the existing customers have placed an order or not.

Query :

```
select distinct c.cust_name,c.city,o.ord_no,o.ord_date,o.pur_amt, case when
c.customer_id in (select distinct o.customer_id from orders) then 'yes' else 'no'
end as 'OrderPlaceOrNot' from customer as c left join orders as o on
c.customer_id=o.customer_id order by o.ord_date;
```

Result Grid						
		Filter Rows:		Export:	Wrap Cell Content: 	
	cust_name	city	ord_no	ord_date	pur_amt	OrderPlaceOrNot
▶	Ramesh	Delhi	NULL	NULL	NULL	no
	Bhavya	Bengalore	NULL	NULL	NULL	no
	Raghu	Dharavad	NULL	NULL	NULL	no
	ram	Gurugram	NULL	NULL	NULL	no
	Bhargav	Mysore	5	2020-03-25	10000	yes
	Rajdeep	Belagavi	10	2020-03-25	5000	yes
	Rajesh	Hubli	7	2020-04-30	9500	yes
	Ramya	Bengalore	17	2020-07-07	1500	yes
	Ravi	Mangalore	11	2020-07-07	8700	yes
	Rajdeep	Belagavi	21	2020-07-08	5000	yes
	Bhaves	Dhanbad	23	2020-09-04	4200	yes
	Suresh	Delhi	24	2020-10-05	3500	yes
	Rajesh	Hubli	25	2020-10-30	2500	yes

11. Write a SQL statement to generate a report with customer name, city, order number, order date, order amount, salesperson name, and commission to determine if any of the existing customers have not placed orders or if they have placed orders through their salesman or by themselves.

Query :

```
select c.cust_name,o.ord_no,o.ord_date,o.pur_amt,s.name ,s.commission,case
when c.customer_id in (select o.customer_id from orders) then 'yes' else 'no' end
as 'Existing' from customer as c left join orders as o on
c.customer_id=o.customer_id left join salesman as s on
s.salesman_id=c.salesman_id;
```

Result Grid							
Filter Rows:							
Export:							
Wrap Cell Content:							
	cust_name	ord_no	ord_date	pur_amt	name	commission	Existing
▶	Bhargav	5	2020-03-25	10000	Prokta	200.2	yes
	Ramesh	NULL	NULL	NULL	Arth	2000	no
	Ramya	17	2020-07-07	1500	Prasanna	300	yes
	Rajesh	25	2020-10-30	2500	Prajwal	100	yes
	Rajesh	7	2020-04-30	9500	Prajwal	100	yes
	Bhavya	NULL	NULL	NULL	Prokta	200.2	no
	Ravi	11	2020-07-07	8700	Pooja	500.5	yes
	Rajdeep	21	2020-07-08	5000	Prokta	200.2	yes
	Rajdeep	10	2020-03-25	5000	Prokta	200.2	yes
	Bhavesh	23	2020-09-04	4200	Priya	1500	yes
	Suresh	24	2020-10-05	3500	Priya	1500	yes
	Raghu	NULL	NULL	NULL	Prajwal	100	no
	ram	NULL	NULL	NULL	Priya	1500	no

12. Write a SQL statement to generate a list in ascending order of salespersons who work either for one or more customers or have not yet joined any of the customers.

Query :

```
select s.salesman_id,s.name, case when s.salesman_id in (select salesman_id
from customer) then 'customer present' else 'no customer' end as 'Work With
Customer' from salesman as s order by s.salesman_id;
```

Result Grid			
Filter Rows:			
	salesman_id	name	Work With Customer
▶	11	Pranav	no customer
	15	Prokta	customer present
	21	Priya	no customer
	24	Prasanna	customer present
	34	Priya	customer present
	39	Prajwal	customer present
	44	Pooja	customer present
	56	Arth	customer present
	61	Priya	customer present

13. write a SQL query to list all salespersons along with customer name, city, grade, order number, date, and amount.

Query :

select

s.salesman_id,s.name,c.cust_name,c.city,c.grade,o.ord_no,o.ord_date,o.pur_amt from salesman as s inner join customer as c on
c.salesman_id=s.salesman_id right join orders as o on
o.salesman_id=s.salesman_id where s.salesman_id is not null;

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	salesman_id	name	cust_name	city	grade	ord_no	ord_date	pur_amt
▶	15	Prokta	Bhargav	Mysore	1	10	2020-03-25	5000
	56	Arth	Ramesh	Delhi	2	21	2020-07-08	5000
	24	Prasanna	Ramya	Bengalore	3	11	2020-07-07	8700
	39	Prajwal	Rajesh	Hubli	2	17	2020-07-07	1500
	15	Prokta	Bhavya	Bengalore	1	10	2020-03-25	5000
	44	Pooja	Ravi	Mangalore	5	25	2020-10-30	2500
	44	Pooja	Ravi	Mangalore	5	7	2020-04-30	9500
	15	Prokta	Rajdeep	Belagavi	3	10	2020-03-25	5000
	61	Priya	Bhaves	Dhanbad	3	24	2020-10-05	3500
	61	Priya	Bhaves	Dhanbad	3	23	2020-09-04	4200
	61	Priya	Suresh	Delhi	4	24	2020-10-05	3500
	61	Priya	Suresh	Delhi	4	23	2020-09-04	4200
	39	Prajwal	Raghu	Dharav	4	17	2020-07-07	1500

14. Write a SQL statement to make a list for the salesmen who either work for one or more customers or yet to join any of the customers. The customer may have placed, either one or more orders on or above order amount 2000 and must have a grade, or he may not have placed any order to the associated supplier.

Query :

```
select s.salesman_id,s.name, s.city, s.commission ,c.cust_name,c.grade, c.city,
o.ord_no,o.ord_date,o.pur_amt from customer c inner join orders o on
c.customer_id = o.customer_id right join salesman s ON s.salesman_id =
o.salesman_id WHERE c.grade IS NOT NULL AND o.pur_amt > 2000;
```

Result Grid										
Filter Rows:				Export:		Wrap Cell Content:				
	salesman_id	name	city	commission	cust_name	grade	city	ord_no	ord_date	pur_amt
▶	11	Pranav	Karwar	200	Bhargav	1	Mysore	5	2020-03-25	10000
	44	Pooja	Hubli	500.5	Rajesh	2	Hubli	7	2020-04-30	9500
	15	Prokta	Mysore	200.2	Rajdeep	3	Belagavi	10	2020-03-25	5000
	24	Prasanna	Bengalore	300	Ravi	5	Mangalore	11	2020-07-07	8700
	56	Arth	Ahmedabad	2000	Rajdeep	3	Belagavi	21	2020-07-08	5000
	61	Priya	Delhi	1500	Bhavesh	3	Dhanbad	23	2020-09-04	4200
	61	Priya	Delhi	1500	Suresh	4	Delhi	24	2020-10-05	3500
	44	Pooja	Hubli	500.5	Rajesh	2	Hubli	25	2020-10-30	2500

15. Write a SQL statement to generate a list of all the salesmen who either work for one or more customers or have yet to join any of them. The customer may have placed one or more orders at or above order amount 2000, and must have a grade, or he may not have placed any orders to the associated supplier.

Query :

```
select s.salesman_id,s.name, s.city, s.commission ,c.cust_name,c.grade, c.city,
o.ord_no,o.ord_date,o.pur_amt from customer c inner join orders o on
c.customer_id = o.customer_id right join salesman s ON s.salesman_id =
o.salesman_id WHERE c.grade IS NOT NULL AND o.pur_amt > 2000;
```

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	salesman_id	name	city	commission	cust_name	grade	city	ord_no	ord_date	pur_amt
	11	Pranav	Karwar	200	Bhargav	1	Mysore	5	2020-03-25	10000
	44	Pooja	Hubli	500.5	Rajesh	2	Hubli	7	2020-04-30	9500
	15	Prokta	Mysore	200.2	Rajdeep	3	Belagavi	10	2020-03-25	5000
	24	Prasanna	Bengalore	300	Ravi	5	Mangalore	11	2020-07-07	8700
	56	Arth	Ahmedabad	2000	Rajdeep	3	Belagavi	21	2020-07-08	5000
	61	Priya	Delhi	1500	Bhavesh	3	Dhanbad	23	2020-09-04	4200
	61	Priya	Delhi	1500	Suresh	4	Delhi	24	2020-10-05	3500
	44	Pooja	Hubli	500.5	Rajesh	2	Hubli	25	2020-10-30	2500

16. Write a SQL statement to generate a report with the customer name, city, order no. order date, purchase amount for only those customers on the list who must have a grade and placed one or more orders or which order(s) have been placed by the customer who neither is on the list nor has a grade.

Query :

```
SELECT c.cust_name, c.city, o.ord_no, o.ord_date, o.pur_amt from customer c
inner join orders o on c.customer_id = o.customer_id where c.grade is not null;
```

Result Grid					
Filter Rows:					
Export:					
	cust_name	city	ord_no	ord_date	pur_amt
▶	Bhargav	Mysore	5	2020-03-25	10000
	Rajesh	Hubli	7	2020-04-30	9500
	Rajdeep	Belagavi	10	2020-03-25	5000
	Ravi	Mangalore	11	2020-07-07	8700
	Ramya	Bengalore	17	2020-07-07	1500
	Rajdeep	Belagavi	21	2020-07-08	5000
	Bhavesb	Dhanbad	23	2020-09-04	4200
	Suresh	Delhi	24	2020-10-05	3500
	Rajesh	Hubli	25	2020-10-30	2500

17. Write a SQL query to combine each row of the salesman table with each row of the customer table.

Query :

select * from salesman cross join customer;

	salesman_id	name	city	commission	customer_id	cust_name	city	grade	salesman_id
▶	61	Priya	Delhi	1500	101	Bhargav	Mysore	1	15
	56	Arth	Ahmedabad	2000	101	Bhargav	Mysore	1	15
	44	Pooja	Hubli	500.5	101	Bhargav	Mysore	1	15
	39	Prajwal	Kodagu	100	101	Bhargav	Mysore	1	15
	34	Priya	Chennai	1500	101	Bhargav	Mysore	1	15
	24	Prasanna	Bengalore	300	101	Bhargav	Mysore	1	15
	21	Priya	Delhi	1500	101	Bhargav	Mysore	1	15
	15	Prokta	Mysore	200.2	101	Bhargav	Mysore	1	15
	11	Pranav	Karwar	200	101	Bhargav	Mysore	1	15
	61	Priya	Delhi	1500	102	Ramesh	Delhi	2	56
	56	Arth	Ahmedabad	2000	102	Ramesh	Delhi	2	56
	44	Pooja	Hubli	500.5	102	Ramesh	Delhi	2	56
	39	Prajwal	Kodagu	100	102	Ramesh	Delhi	2	56
	34	Priya	Chennai	1500	102	Ramesh	Delhi	2	56
	24	Prasanna	Bengalore	300	102	Ramesh	Delhi	2	56
	21	Priya	Delhi	1500	102	Ramesh	Delhi	2	56

Result 9 ×

18. Write a SQL statement to create a Cartesian product between salesperson and customer, i.e. each salesperson will appear for all customers and vice versa for that salesperson who belongs to that city

Query :

select * from salesman cross join customer on customer.city=salesman.city;

Result Grid									
Filter Rows:									
Export:									
Wrap Cell Content:									
	salesman_id	name	city	commission	customer_id	cust_name	city	grade	salesman_id
▶	15	Prokta	Mysore	200.2	101	Bhargav	Mysore	1	15
	61	Priya	Delhi	1500	102	Ramesh	Delhi	2	56
	21	Priya	Delhi	1500	102	Ramesh	Delhi	2	56
	24	Prasanna	Bengalore	300	206	Ramya	Bengalore	3	24
	44	Pooja	Hubli	500.5	225	Rajesh	Hubli	2	39
	24	Prasanna	Bengalore	300	300	Bhavya	Bengalore	1	15
	61	Priya	Delhi	1500	497	Suresh	Delhi	4	61
	21	Priya	Delhi	1500	497	Suresh	Delhi	4	61

19. Write a SQL statement to create a Cartesian product between salesperson and customer, i.e. each salesperson will appear for every customer and vice versa for those salesmen who belong to a city and customers who require a grade.

Query :

```
select * from salesman cross join customer on customer.city=salesman.city
where customer.grade is not null;
```

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	salesman_id	name	city	commission	customer_id	cust_name	city	grade	salesman_id
▶	15	Prokta	Mysore	200.2	101	Bhargav	Mysore	1	15
	61	Priya	Delhi	1500	102	Ramesh	Delhi	2	56
	21	Priya	Delhi	1500	102	Ramesh	Delhi	2	56
	24	Prasanna	Bengalore	300	206	Ramya	Bengalore	3	24
	44	Pooja	Hubli	500.5	225	Rajesh	Hubli	2	39
	24	Prasanna	Bengalore	300	300	Bhavya	Bengalore	1	15
	61	Priya	Delhi	1500	497	Suresh	Delhi	4	61
	21	Priya	Delhi	1500	497	Suresh	Delhi	4	61

20. Write a SQL statement to make a Cartesian product between salesman and customer i.e. each salesman will appear for all customers and vice versa for those salesmen who must belong to a city which is not the same as his customer and the customers should have their own grade.

Query :

**select * from salesman cross join customer on customer.city!=salesman.city
where customer.grade is not null;**

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	salesman_id	name	city	commission	customer_id	cust_name	city	grade	salesman_id
▶	61	Priya	Delhi	1500	101	Bhargav	Mysore	1	15
	56	Arth	Ahmedabad	2000	101	Bhargav	Mysore	1	15
	44	Pooja	Hubli	500.5	101	Bhargav	Mysore	1	15
	39	Prajwal	Kodagu	100	101	Bhargav	Mysore	1	15
	34	Priya	Chennai	1500	101	Bhargav	Mysore	1	15
	24	Prasanna	Bengalore	300	101	Bhargav	Mysore	1	15
	21	Priya	Delhi	1500	101	Bhargav	Mysore	1	15
	11	Pranav	Karwar	200	101	Bhargav	Mysore	1	15
	56	Arth	Ahmedabad	2000	102	Ramesh	Delhi	2	56
	44	Pooja	Hubli	500.5	102	Ramesh	Delhi	2	56
	39	Prajwal	Kodagu	100	102	Ramesh	Delhi	2	56
	34	Priya	Chennai	1500	102	Ramesh	Delhi	2	56
	24	Prasanna	Bengalore	300	102	Ramesh	Delhi	2	56
	15	Prokta	Mysore	200.2	102	Ramesh	Delhi	2	56
	11	Pranav	Karwar	200	102	Ramesh	Delhi	2	56
	61	Priya	Delhi	1500	106	Ramesh	Bengal	2	24

Result 14 x