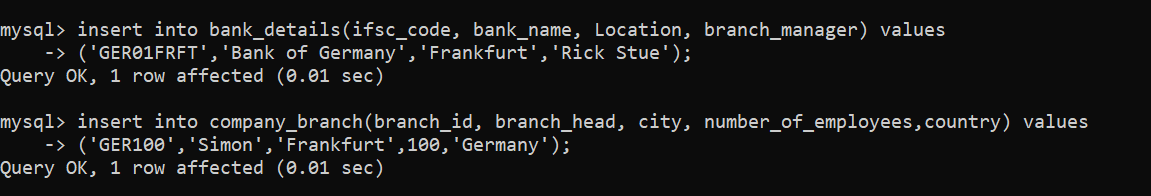
**Queries for insert:**

*insert into bank\_details(ifsc\_code, bank\_name, Location, branch\_manager) values*

*('GER01FRFT','Bank of Germany','Frankfurt','Rick Stue');*

*insert into company\_branch(branch\_id, branch\_head, city, number\_of\_employees,country) values ('GER100','Simon','Frankfurt',100,'Germany');*

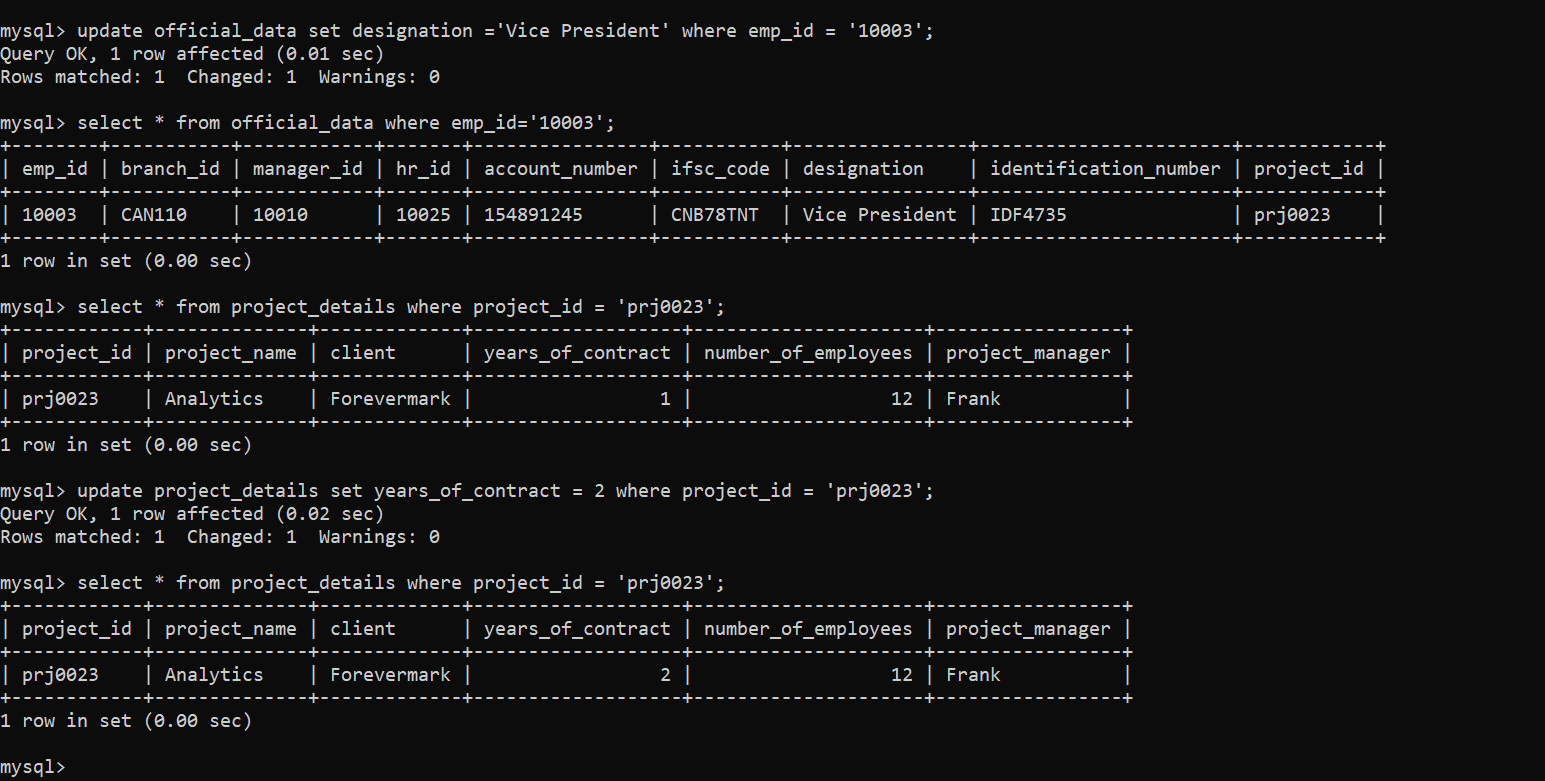


==================================================================================

**Queries to update:**

*update official\_data set designation ='Vice President' where emp\_id = '10003';*

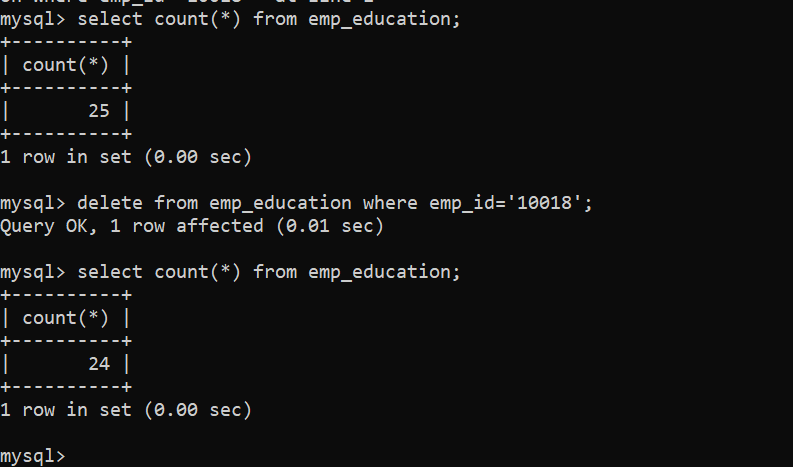
*update project\_details set years\_of\_contract = 2 where project\_id = 'prj0023';*



==================================================================================

**Delete Statement :**

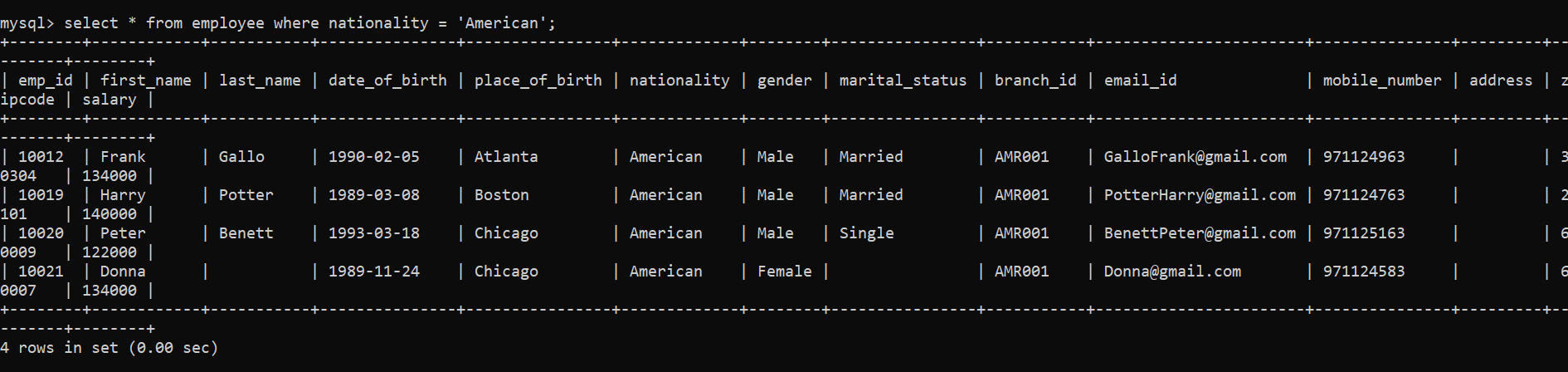
*delete from emp\_education where emp\_id='10018';*



===================================================================================

**Select statement :**

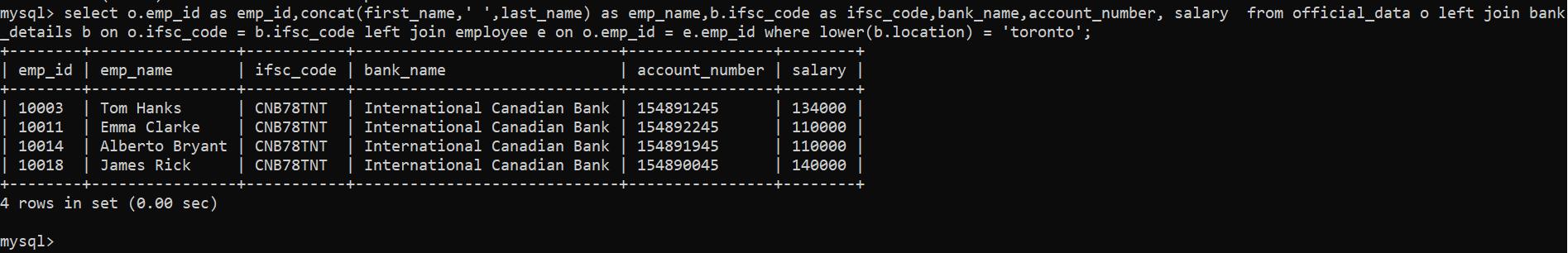
*select \* from employee where nationality = 'American';*



===================================================================================

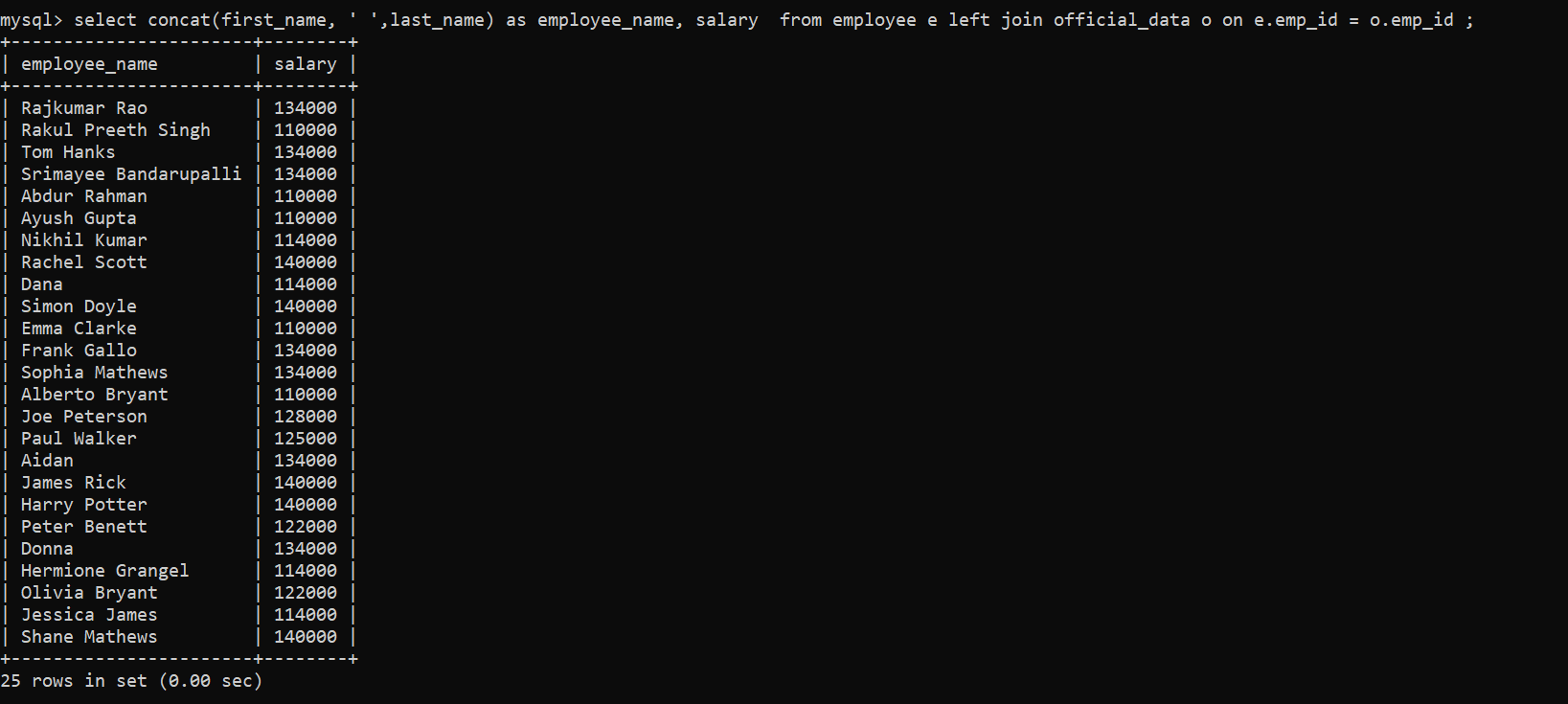
**Joining three tables:**

*select o.emp\_id as emp\_id,concat(first\_name,' ',last\_name) as emp\_name,b.ifsc\_code as ifsc\_code,bank\_name,account\_number, salary from* ***official\_data*** *o left join* ***bank\_details*** *b on o.ifsc\_code = b.ifsc\_code left join* ***employee*** *e on o.emp\_id = e.emp\_id where lower(b.location) = 'toronto';*



**Left join on two tables :**

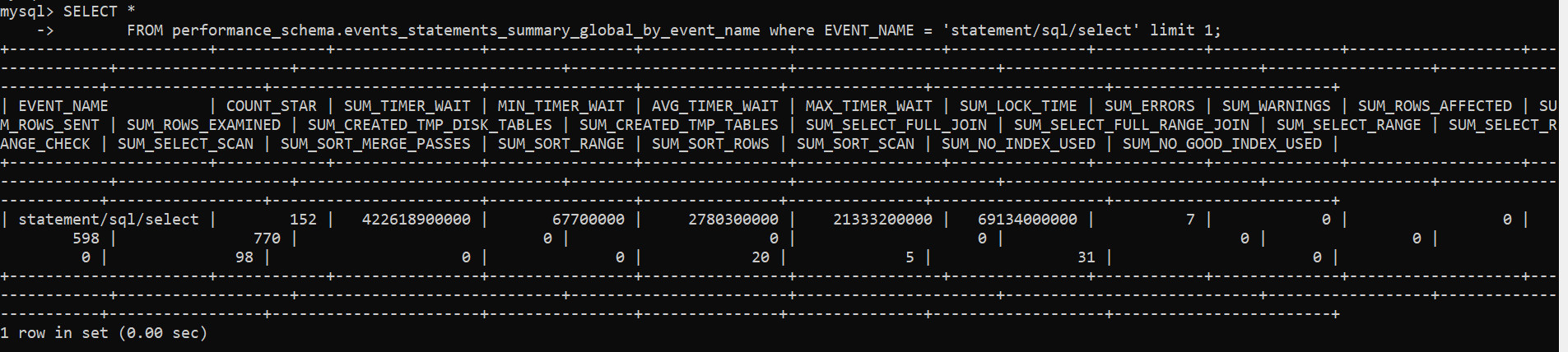
*select concat(first\_name, ' ',last\_name) as employee\_name, salary from employee e left join official\_data o on e.emp\_id = o.emp\_id ;*



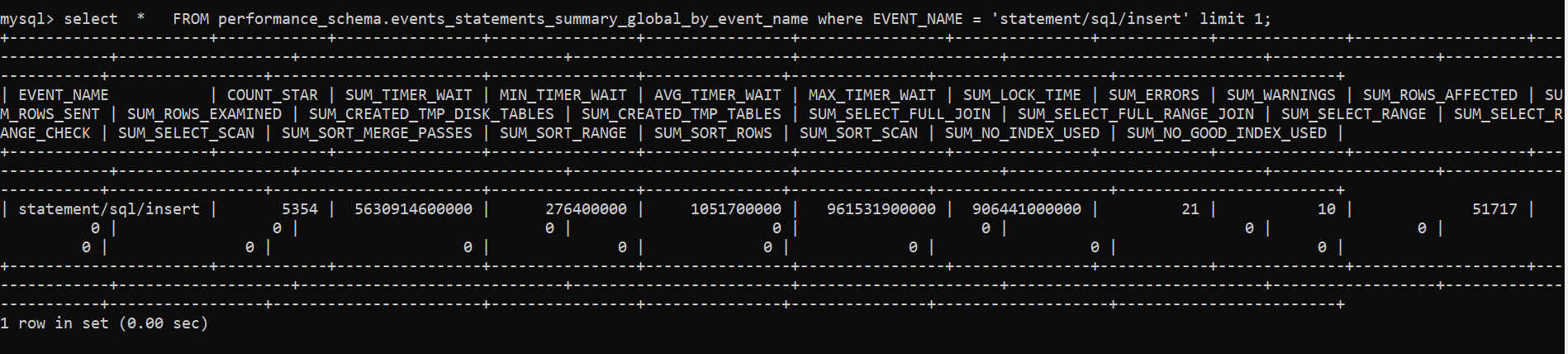
**===================================================================================**

**Summary statements:**

*SELECT \* FROM performance\_schema.events\_statements\_summary\_global\_by\_event\_name where EVENT\_NAME = 'statement/sql/select' limit 1;*



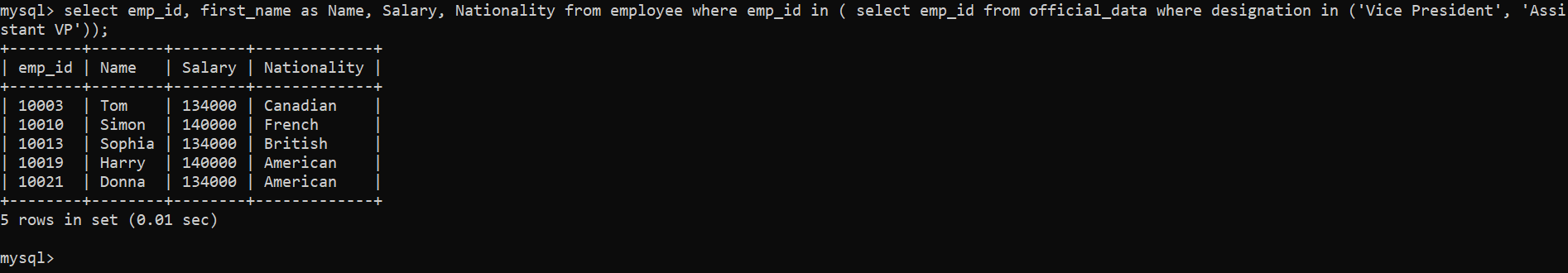
*select \* FROM performance\_schema.events\_statements\_summary\_global\_by\_event\_name where EVENT\_NAME = 'statement/sql/insert' limit 1;*



**===================================================================================**

**Multi Table query/Sub query :**

*select emp\_id, first\_name as Name, Salary, Nationality from employee where emp\_id in ( select emp\_id from official\_data where designation in ('Vice President', 'Assistant VP'));*



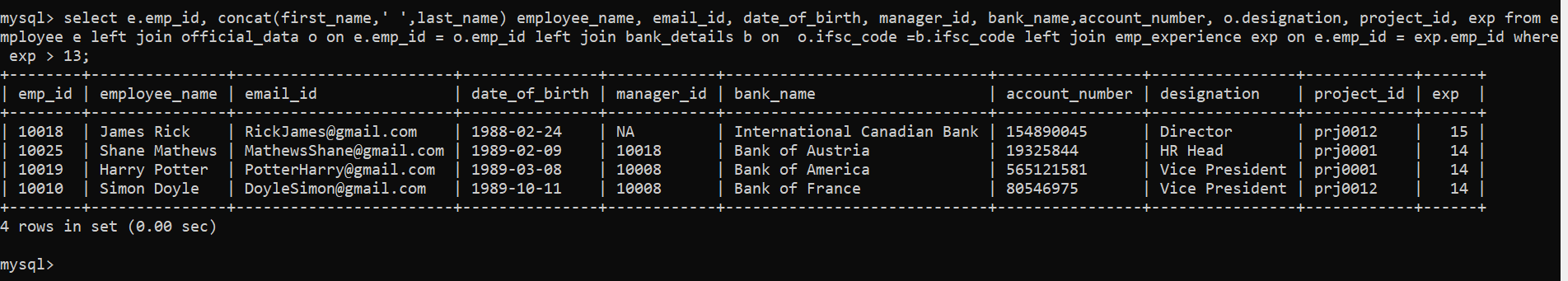
**===================================================================================**

**Query of My Choice:**

*Below is used to fetch all details of the employees whose experience is grater than 13, it uses the join on 4 different tables*

-->

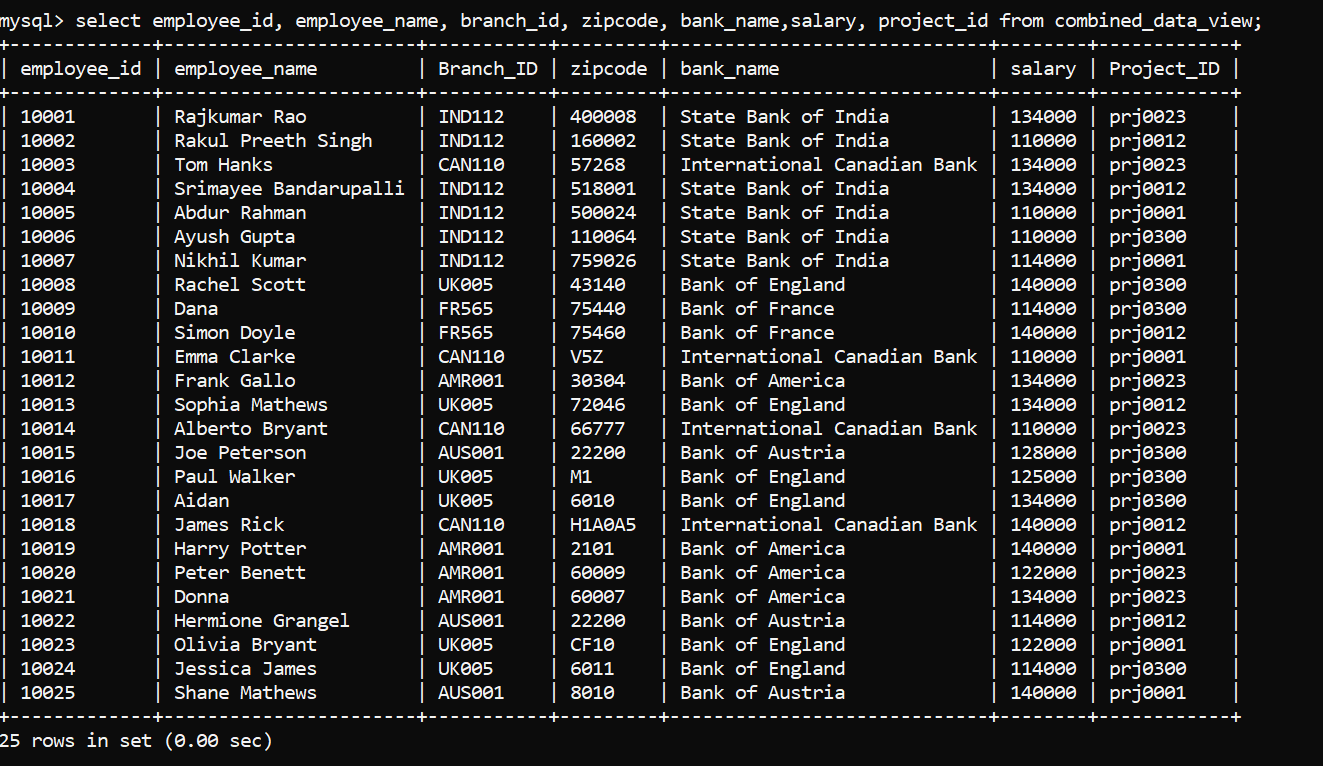
*select e.emp\_id, concat(first\_name,' ',last\_name) employee\_name, email\_id, date\_of\_birth, manager\_id, bank\_name,account\_number, o.designation, project\_id,exp from* ***employee*** *e left join* ***official\_data*** *o on e.emp\_id = o.emp\_id left join* ***bank\_details*** *b on o.ifsc\_code =b.ifsc\_code left join* ***emp\_experience*** *exp on e.emp\_id = exp.emp\_id where exp > 13;*



**View Creation and select statements from it:**

1. combined\_data\_view

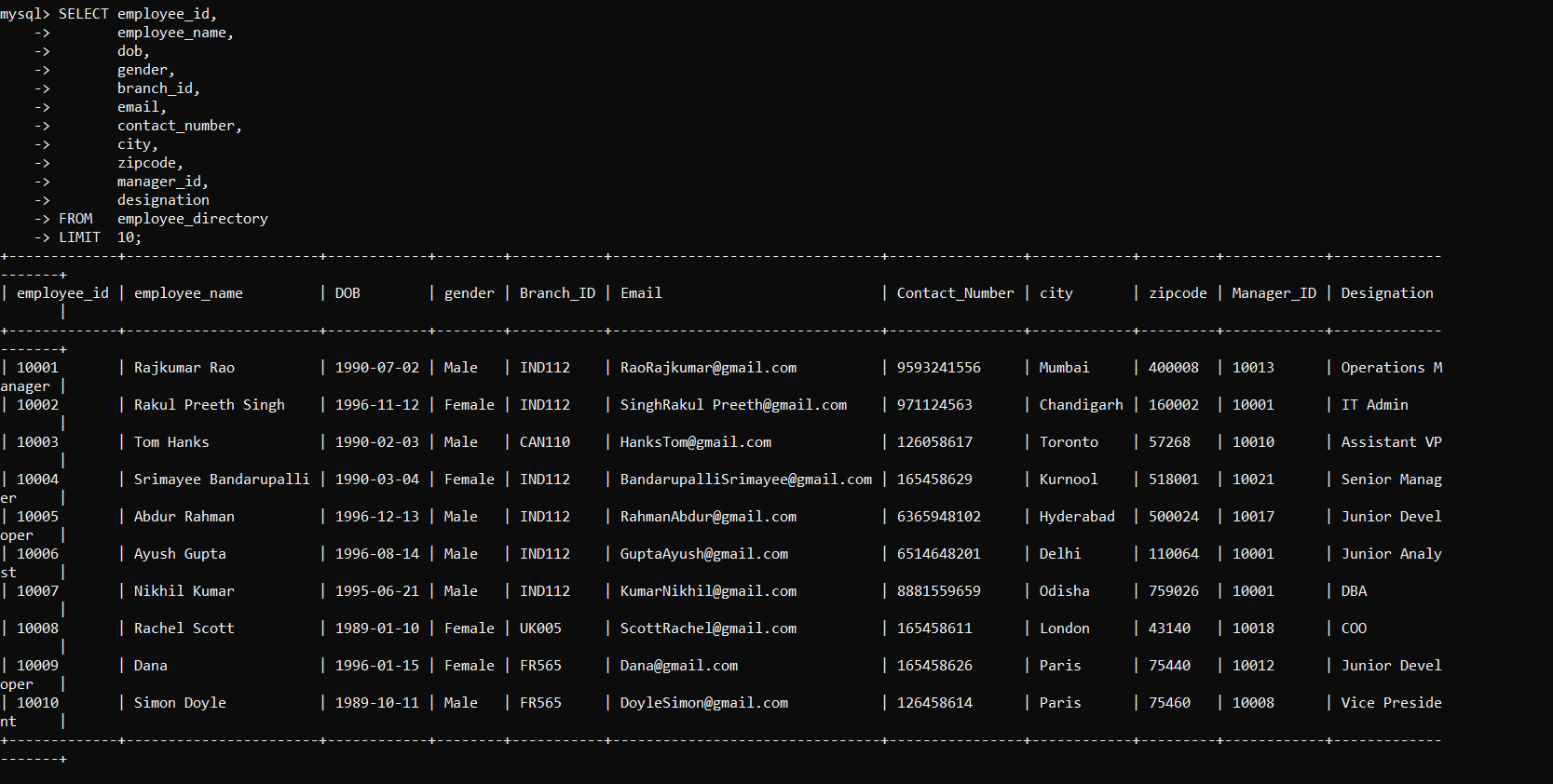
*select employee\_id, employee\_name, branch\_id, zipcode, bank\_name,salary, project\_id from combined\_data\_view;*



1. employee\_directory :

*SELECT employee\_id, employee\_name,dob,gender,branch\_id,email,*

*contact\_number,city,zipcode,manager\_id,designation FROM employee\_directory LIMIT 10;*



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Below is the back to back execution result of all the above twelve queries, I have copy pasted it as I was not able to take the screenshot of all 12 queries in a single screenshot, individual screenshots are already pasted above.

mysql> insert into bank\_details(ifsc\_code, bank\_name, Location, branch\_manager) values

-> ('GER01FRFT','Bank of Germany','Frankfurt','Rick Stue');

Query OK, 1 row affected (0.01 sec)

mysql> insert into company\_branch(branch\_id, branch\_head, city, number\_of\_employees,country) values ('GER100','Simon','Frankfurt',100,'Germany');

Query OK, 1 row affected (0.01 sec)

mysql> update official\_data set designation ='Vice President' where emp\_id = '10003';

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> update project\_details set years\_of\_contract = 2 where project\_id = 'prj0023';

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> delete from emp\_education where emp\_id='10018

'> ;

'> ';

Query OK, 0 rows affected (0.00 sec)

mysql> select \* from employee where nationality = 'American';

+--------+------------+-----------+---------------+----------------+-------------+--------+----------------+-----------+-----------------------+---------------+---------+---------+--------+

| emp\_id | first\_name | last\_name | date\_of\_birth | place\_of\_birth | nationality | gender | marital\_status | branch\_id | email\_id | mobile\_number | address | zipcode | salary |

+--------+------------+-----------+---------------+----------------+-------------+--------+----------------+-----------+-----------------------+---------------+---------+---------+--------+

| 10012 | Frank | Gallo | 1990-02-05 | Atlanta | American | Male | Married | AMR001 | GalloFrank@gmail.com | 971124963 | | 30304 | 134000 |

| 10019 | Harry | Potter | 1989-03-08 | Boston | American | Male | Married | AMR001 | PotterHarry@gmail.com | 971124763 | | 2101 | 140000 |

| 10020 | Peter | Benett | 1993-03-18 | Chicago | American | Male | Single | AMR001 | BenettPeter@gmail.com | 971125163 | | 60009 | 122000 |

| 10021 | Donna | | 1989-11-24 | Chicago | American | Female | | AMR001 | Donna@gmail.com | 971124583 | | 60007 | 134000 |

+--------+------------+-----------+---------------+----------------+-------------+--------+----------------+-----------+-----------------------+---------------+---------+---------+--------+

4 rows in set (0.00 sec)

mysql> select o.emp\_id as emp\_id,concat(first\_name,' ',last\_name) as emp\_name,b.ifsc\_code as ifsc\_code,bank\_name,account\_number, salary from official\_data o left join bank\_details b on o.ifsc\_code = b.ifsc\_code left join employee e on o.emp\_id = e.emp\_id where lower(b.location) = 'toronto';

+--------+----------------+-----------+-----------------------------+----------------+--------+

| emp\_id | emp\_name | ifsc\_code | bank\_name | account\_number | salary |

+--------+----------------+-----------+-----------------------------+----------------+--------+

| 10003 | Tom Hanks | CNB78TNT | International Canadian Bank | 154891245 | 134000 |

| 10011 | Emma Clarke | CNB78TNT | International Canadian Bank | 154892245 | 110000 |

| 10014 | Alberto Bryant | CNB78TNT | International Canadian Bank | 154891945 | 110000 |

| 10018 | James Rick | CNB78TNT | International Canadian Bank | 154890045 | 140000 |

+--------+----------------+-----------+-----------------------------+----------------+--------+

4 rows in set (0.01 sec)

mysql> select concat(first\_name, ' ',last\_name) as employee\_name, salary from employee e left join official\_data o on e.emp\_id = o.emp\_id ;

+-----------------------+--------+

| employee\_name | salary |

+-----------------------+--------+

| Rajkumar Rao | 134000 |

| Rakul Preeth Singh | 110000 |

| Tom Hanks | 134000 |

| Srimayee Bandarupalli | 134000 |

| Abdur Rahman | 110000 |

| Ayush Gupta | 110000 |

| Nikhil Kumar | 114000 |

| Rachel Scott | 140000 |

| Dana | 114000 |

| Simon Doyle | 140000 |

| Emma Clarke | 110000 |

| Frank Gallo | 134000 |

| Sophia Mathews | 134000 |

| Alberto Bryant | 110000 |

| Joe Peterson | 128000 |

| Paul Walker | 125000 |

| Aidan | 134000 |

| James Rick | 140000 |

| Harry Potter | 140000 |

| Peter Benett | 122000 |

| Donna | 134000 |

| Hermione Grangel | 114000 |

| Olivia Bryant | 122000 |

| Jessica James | 114000 |

| Shane Mathews | 140000 |

+-----------------------+--------+

25 rows in set (0.00 sec)

mysql> SELECT \* FROM performance\_schema.events\_statements\_summary\_global\_by\_event\_name where EVENT\_NAME = 'statement/sql/select' limit 1;

+----------------------+------------+----------------+----------------+----------------+----------------+---------------+------------+--------------+-------------------+---------------+-------------------+-----------------------------+------------------------+----------------------+----------------------------+------------------+------------------------+-----------------+-----------------------+----------------+---------------+---------------+-------------------+------------------------+

| EVENT\_NAME | COUNT\_STAR | SUM\_TIMER\_WAIT | MIN\_TIMER\_WAIT | AVG\_TIMER\_WAIT | MAX\_TIMER\_WAIT | SUM\_LOCK\_TIME | SUM\_ERRORS | SUM\_WARNINGS | SUM\_ROWS\_AFFECTED | SUM\_ROWS\_SENT | SUM\_ROWS\_EXAMINED | SUM\_CREATED\_TMP\_DISK\_TABLES | SUM\_CREATED\_TMP\_TABLES | SUM\_SELECT\_FULL\_JOIN | SUM\_SELECT\_FULL\_RANGE\_JOIN | SUM\_SELECT\_RANGE | SUM\_SELECT\_RANGE\_CHECK | SUM\_SELECT\_SCAN | SUM\_SORT\_MERGE\_PASSES | SUM\_SORT\_RANGE | SUM\_SORT\_ROWS | SUM\_SORT\_SCAN | SUM\_NO\_INDEX\_USED | SUM\_NO\_GOOD\_INDEX\_USED |

+----------------------+------------+----------------+----------------+----------------+----------------+---------------+------------+--------------+-------------------+---------------+-------------------+-----------------------------+------------------------+----------------------+----------------------------+------------------+------------------------+-----------------+-----------------------+----------------+---------------+---------------+-------------------+------------------------+

| statement/sql/select | 176 | 517331900000 | 67700000 | 2939300000 | 21333200000 | 80953000000 | 10 | 0 | 0 | 1111 | 1448 | 0 | 0 | 0 | 0 | 0 | 0 | 117 | 0 | 0 | 20 | 5 | 41 | 0 |

+----------------------+------------+----------------+----------------+----------------+----------------+---------------+------------+--------------+-------------------+---------------+-------------------+-----------------------------+------------------------+----------------------+----------------------------+------------------+------------------------+-----------------+-----------------------+----------------+---------------+---------------+-------------------+------------------------+

1 row in set (0.00 sec)

mysql> select \* FROM performance\_schema.events\_statements\_summary\_global\_by\_event\_name where EVENT\_NAME = 'statement/sql/insert' limit 1;

+----------------------+------------+----------------+----------------+----------------+----------------+---------------+------------+--------------+-------------------+---------------+-------------------+-----------------------------+------------------------+----------------------+----------------------------+------------------+------------------------+-----------------+-----------------------+----------------+---------------+---------------+-------------------+------------------------+

| EVENT\_NAME | COUNT\_STAR | SUM\_TIMER\_WAIT | MIN\_TIMER\_WAIT | AVG\_TIMER\_WAIT | MAX\_TIMER\_WAIT | SUM\_LOCK\_TIME | SUM\_ERRORS | SUM\_WARNINGS | SUM\_ROWS\_AFFECTED | SUM\_ROWS\_SENT | SUM\_ROWS\_EXAMINED | SUM\_CREATED\_TMP\_DISK\_TABLES | SUM\_CREATED\_TMP\_TABLES | SUM\_SELECT\_FULL\_JOIN | SUM\_SELECT\_FULL\_RANGE\_JOIN | SUM\_SELECT\_RANGE | SUM\_SELECT\_RANGE\_CHECK | SUM\_SELECT\_SCAN | SUM\_SORT\_MERGE\_PASSES | SUM\_SORT\_RANGE | SUM\_SORT\_ROWS | SUM\_SORT\_SCAN | SUM\_NO\_INDEX\_USED | SUM\_NO\_GOOD\_INDEX\_USED |

+----------------------+------------+----------------+----------------+----------------+----------------+---------------+------------+--------------+-------------------+---------------+-------------------+-----------------------------+------------------------+----------------------+----------------------------+------------------+------------------------+-----------------+-----------------------+----------------+---------------+---------------+-------------------+------------------------+

| statement/sql/insert | 5357 | 5653879100000 | 276400000 | 1055400000 | 961531900000 | 906912000000 | 21 | 10 | 51720 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

+----------------------+------------+----------------+----------------+----------------+----------------+---------------+------------+--------------+-------------------+---------------+-------------------+-----------------------------+------------------------+----------------------+----------------------------+------------------+------------------------+-----------------+-----------------------+----------------+---------------+---------------+-------------------+------------------------+

1 row in set (0.00 sec)

mysql> select emp\_id, first\_name as Name, Salary, Nationality from employee where emp\_id in ( select emp\_id from official\_data where designation in ('Vice President', 'Assistant VP'));

+--------+--------+--------+-------------+

| emp\_id | Name | Salary | Nationality |

+--------+--------+--------+-------------+

| 10003 | Tom | 134000 | Canadian |

| 10010 | Simon | 140000 | French |

| 10013 | Sophia | 134000 | British |

| 10019 | Harry | 140000 | American |

| 10021 | Donna | 134000 | American |

+--------+--------+--------+-------------+

5 rows in set (0.00 sec)

mysql> select e.emp\_id, concat(first\_name,' ',last\_name) employee\_name, email\_id, date\_of\_birth, manager\_id, bank\_name,account\_number, designation, project\_id,exp from employee e left join official\_data o on e.emp\_id = o.emp\_id left join bank\_details b on o.ifsc\_code =b.ifsc\_code left join emp\_experience exp on e.emp\_id = exp.emp\_id where exp > 13;

ERROR 1052 (23000): Column 'designation' in field list is ambiguous

mysql> select e.emp\_id, concat(first\_name,' ',last\_name) employee\_name, email\_id, date\_of\_birth, manager\_id, bank\_name,account\_number, o.designation, project\_id,exp from employee e left join official\_data o on e.emp\_id = o.emp\_id left join bank\_details b on o.ifsc\_code =b.ifsc\_code left join emp\_experience exp on e.emp\_id = exp.emp\_id where exp > 13;

+--------+---------------+------------------------+---------------+------------+-----------------------------+----------------+----------------+------------+------+

| emp\_id | employee\_name | email\_id | date\_of\_birth | manager\_id | bank\_name | account\_number | designation | project\_id | exp |

+--------+---------------+------------------------+---------------+------------+-----------------------------+----------------+----------------+------------+------+

| 10018 | James Rick | RickJames@gmail.com | 1988-02-24 | NA | International Canadian Bank | 154890045 | Director | prj0012 | 15 |

| 10025 | Shane Mathews | MathewsShane@gmail.com | 1989-02-09 | 10018 | Bank of Austria | 19325844 | HR Head | prj0001 | 14 |

| 10019 | Harry Potter | PotterHarry@gmail.com | 1989-03-08 | 10008 | Bank of America | 565121581 | Vice President | prj0001 | 14 |

| 10010 | Simon Doyle | DoyleSimon@gmail.com | 1989-10-11 | 10008 | Bank of France | 80546975 | Vice President | prj0012 | 14 |

+--------+---------------+------------------------+---------------+------------+-----------------------------+----------------+----------------+------------+------+

4 rows in set (0.00 sec)

**mysql> create view employee\_data as**

**-> select**

**-> e.emp\_id as employee\_id,**

**-> concat(first\_name,' ',last\_name) as employee\_name,**

**-> e.date\_of\_birth as DOB,**

**-> e.gender as gender,**

**-> e.branch\_id as Branch\_ID,**

**-> e.email\_id as Email,**

**-> e.mobile\_number as Contact\_Number,**

**-> city ,**

**-> state ,**

**-> e.zipcode as zipcode,**

**-> country ,**

**-> od.manager\_id as Manager\_ID,**

**-> od.hr\_id as hr\_id,**

**-> od.designation as Designation,**

**-> od.project\_id as Project\_ID,**

**-> pd.project\_name as project\_name,**

**-> pd.project\_manager as Project\_Manager**

**-> from employee e left join emp\_address ea on e.zipcode = ea.zipcode**

**-> left join official\_data od on e.emp\_id = od.emp\_id**

**-> left join project\_details pd on od.project\_id = pd.project\_id;**

Query OK, 0 rows affected (0.03 sec)

mysql> select \* from employee\_data;

+-------------+-----------------------+------------+--------+-----------+--------------------------------+----------------+------------+------------------+---------+--------------------------+------------+-------+--------------------+------------+--------------+-----------------+

| employee\_id | employee\_name | DOB | gender | Branch\_ID | Email | Contact\_Number | city | state | zipcode | country | Manager\_ID | hr\_id | Designation | Project\_ID | project\_name | Project\_Manager |

+-------------+-----------------------+------------+--------+-----------+--------------------------------+----------------+------------+------------------+---------+--------------------------+------------+-------+--------------------+------------+--------------+-----------------+

| 10001 | Rajkumar Rao | 1990-07-02 | Male | IND112 | RaoRajkumar@gmail.com | 9593241556 | Mumbai | Maharastra | 400008 | India | 10013 | 10025 | Operations Manager | prj0023 | Analytics | Frank |

| 10002 | Rakul Preeth Singh | 1996-11-12 | Female | IND112 | SinghRakul Preeth@gmail.com | 971124563 | Chandigarh | Haryana | 160002 | India | 10001 | 10011 | IT Admin | prj0012 | Credit | Srimayee |

| 10003 | Tom Hanks | 1990-02-03 | Male | CAN110 | HanksTom@gmail.com | 126058617 | Toronto | Ontario | 57268 | Canada | 10010 | 10025 | Assistant VP | prj0023 | Analytics | Frank |

| 10004 | Srimayee Bandarupalli | 1990-03-04 | Female | IND112 | BandarupalliSrimayee@gmail.com | 165458629 | Kurnool | Telangana | 518001 | India | 10021 | 10025 | Senior Manager | prj0012 | Credit | Srimayee |

| 10005 | Abdur Rahman | 1996-12-13 | Male | IND112 | RahmanAbdur@gmail.com | 6365948102 | Hyderabad | Telangana | 500024 | India | 10017 | 10011 | Junior Developer | prj0001 | Ovsi | Tom Hanks |

| 10006 | Ayush Gupta | 1996-08-14 | Male | IND112 | GuptaAyush@gmail.com | 6514648201 | Delhi | Delhi | 110064 | India | 10001 | 10011 | Junior Analyst | prj0300 | Operations | Rajkumar |

| 10007 | Nikhil Kumar | 1995-06-21 | Male | IND112 | KumarNikhil@gmail.com | 8881559659 | Odisha | Odisha | 759026 | India | 10001 | 10016 | DBA | prj0001 | Ovsi | Tom Hanks |

| 10008 | Rachel Scott | 1989-01-10 | Female | UK005 | ScottRachel@gmail.com | 165458611 | London | england | 43140 | United Kingdom | 10018 | 10025 | COO | prj0300 | Operations | Rajkumar |

| 10009 | Dana | 1996-01-15 | Female | FR565 | Dana@gmail.com | 165458626 | Paris | le-de-France | 75440 | France | 10012 | 10011 | Junior Developer | prj0300 | Operations | Rajkumar |

| 10010 | Simon Doyle | 1989-10-11 | Male | FR565 | DoyleSimon@gmail.com | 126458614 | Paris | le-de-France | 75460 | France | 10008 | 10025 | Vice President | prj0012 | Credit | Srimayee |

| 10011 | Emma Clarke | 1996-05-16 | Female | CAN110 | ClarkeEmma@gmail.com | 165458623 | vancouver | British columbia | V5Z | Canada | 10025 | 10016 | Assistant HR | prj0001 | Ovsi | Tom Hanks |

| 10012 | Frank Gallo | 1990-02-05 | Male | AMR001 | GalloFrank@gmail.com | 971124963 | Atlanta | Georgia | 30304 | United States of America | 10021 | 10025 | Senior Manager | prj0023 | Analytics | Frank |

| 10013 | Sophia Mathews | 1990-01-06 | Female | UK005 | MathewsSophia@gmail.com | 165458614 | England | England | 72046 | United Kingdom | 10019 | 10025 | Assistant VP | prj0012 | Credit | Srimayee |

| 10014 | Alberto Bryant | 1996-11-17 | Male | CAN110 | BryantAlberto@gmail.com | 126258657 | Toronto | Ontario | 66777 | Canada | 10017 | 10011 | Developer | prj0023 | Analytics | Frank |

| 10015 | Joe Peterson | 1991-01-20 | Male | AUS001 | PetersonJoe@gmail.com | 971125563 | Vienna | Vienna | 22200 | Austria | 10017 | 10016 | Senior Developer | prj0300 | Operations | Rajkumar |

| 10016 | Paul Walker | 1992-05-22 | Male | UK005 | WalkerPaul@gmail.com | 125658619 | Manchester | England | M1 | United Kingdom | 10025 | 10025 | HR | prj0300 | Operations | Rajkumar |

| 10017 | Aidan | 1990-06-07 | Male | UK005 | Aidan@gmail.com | 125458617 | Bristol | England | 6010 | United Kingdom | 10019 | 10025 | Senior Manager | prj0300 | Operations | Rajkumar |

| 10018 | James Rick | 1988-02-24 | Male | CAN110 | RickJames@gmail.com | 125858627 | Montreal | Québec | H1A0A5 | Canada | NA | 10025 | Director | prj0012 | Credit | Srimayee |

| 10019 | Harry Potter | 1989-03-08 | Male | AMR001 | PotterHarry@gmail.com | 971124763 | Boston | Massachusetts | 2101 | United States of America | 10008 | 10025 | Vice President | prj0001 | Ovsi | Tom Hanks |

| 10020 | Peter Benett | 1993-03-18 | Male | AMR001 | BenettPeter@gmail.com | 971125163 | Chicago | Illinois | 60009 | United States of America | 10001 | 10016 | IT Admin | prj0023 | Analytics | Frank |

| 10021 | Donna | 1989-11-24 | Female | AMR001 | Donna@gmail.com | 971124583 | Chicago | Illinois | 60007 | United States of America | 10008 | 10025 | Vice President | prj0023 | Analytics | Frank |

| 10022 | Hermione Grangel | 1993-07-19 | Female | AUS001 | GrangelHermione@gmail.com | 165428966 | Vienna | Vienna | 22200 | Austria | 10012 | 10016 | Senior Analyst | prj0012 | Credit | Srimayee |

| 10023 | Olivia Bryant | 1993-01-23 | Female | UK005 | BryantOlivia@gmail.com | 165458617 | Cardiff | Wales | CF10 | United Kingdom | 10017 | 10016 | Senior Developer | prj0001 | Ovsi | Tom Hanks |

| 10024 | Jessica James | 1993-11-25 | Female | UK005 | JamesJessica@gmail.com | 165458620 | Bristol | England | 6011 | United Kingdom | 10012 | 10016 | Senior Analyst | prj0300 | Operations | Rajkumar |

| 10025 | Shane Mathews | 1989-02-09 | Male | AUS001 | MathewsShane@gmail.com | 971125363 | Graz | Styria | 8010 | Austria | 10018 | NA | HR Head | prj0001 | Ovsi | Tom Hanks |

+-------------+-----------------------+------------+--------+-----------+--------------------------------+----------------+------------+------------------+---------+--------------------------+------------+-------+--------------------+------------+--------------+-----------------+

25 rows in set (0.02 sec)

mysql>