NAME: PRITESH SANJAY SINGH

PROJECT: SQL Server

1. Write a query to get Profile ID, Full Name and Contact Number of the tenant who has stayed with us for the longest time period in the past.

Query:

SELECT TOP 1 a.profile\_id, CONCAT(a.first\_name,' ', a.last\_name) as full\_name, a.phone as contact\_number,

DATEDIFF(day, CAST(b.Move\_In\_Date as DATE), b.Move\_Out\_Date) as time\_period

FROM dbo.Profiles a

INNER JOIN dbo.Tenancy\_histories b

ON a.profile\_id = b.profile\_id

ORDER BY time\_period desc;

1. Write a query to get the Full name, email id, phone of tenants who are married and paying rent > 9000 using subqueries.

Query:

SELECT CONCAT(first\_name,' ', last\_name) as full\_name, email\_id, phone

FROM dbo.Profiles

WHERE marital\_status = 'Y' AND profile\_id in (

SELECT profile\_id

FROM dbo.Tenancy\_Histories

WHERE rent > 9000);

1. Write a query to display profile id, full name, phone, email id, city , house id, move\_in\_date , move\_out\_date, rent, total number of referrals made, latest employer and the occupational category of all the tenants living in Bangalore or Pune in the time period of jan 2015 to jan 2016 sorted by their rent in descending order.

Query:

SELECT a.profile\_id, a.first\_name+' '+a.last\_name as full\_name, a.phone, a.email\_id, a.city

, b.house\_id, b.Move\_In\_Date, b.Move\_Out\_Date, b.rent

, c.latest\_employer, c.occupational\_category

, COUNT(d.profile\_id) as Total\_referral\_made

FROM dbo.Profiles a

INNER JOIN dbo.Tenancy\_histories b

ON (a.profile\_id = b.profile\_id AND move\_in\_date >= convert(date, 'Jan 2015') AND move\_out\_date <= convert(date, 'Jan 2016'))

INNER JOIN dbo.Employment\_details c

ON a.profile\_id = c.profile\_id

LEFT JOIN dbo.Referrals d

ON a.profile\_id = d.profile\_id

WHERE (a.city in ('Bangalore','Pune'))

GROUP BY a.profile\_id, a.first\_name+' '+a.last\_name, a.phone, a.email\_id, a.city

, b.house\_id, b.Move\_In\_Date, b.Move\_Out\_Date, b.rent

, c.latest\_employer, c.occupational\_category

ORDER BY b.rent DESC;

1. (a) Write a sql snippet to find the full\_name, email\_id, phone number and referral code of all the tenants who have referred more than once.

(b) Also find the total bonus amount they should receive given that the bonus gets calculated only for valid referrals.

Query:

(a)

SELECT P.profile\_id, P.first\_name+' '+P.last\_name as full\_name, P.email\_id, P.phone, COUNT(R.profile\_id) as referral\_made

FROM dbo.Profiles P

INNER JOIN dbo.Referrals R

ON P.profile\_id = R.profile\_id

GROUP BY P.profile\_id, P.first\_name+' '+P.last\_name, P.email\_id, P.phone

HAVING COUNT(R.profile\_id)>1;

\*I am also attaching the snippet file

(b)

SELECT P.profile\_id, P.first\_name+' '+P.last\_name as full\_name, P.email\_id, P.phone, COUNT(R.profile\_id) as referral\_made, SUM(R.referrer\_bonus\_amount) as bonus\_amount

FROM dbo.Profiles P

INNER JOIN dbo.Referrals R

ON P.profile\_id = R.profile\_id

WHERE R.referral\_valid = 1

GROUP BY P.profile\_id, P.first\_name+' '+P.last\_name, P.email\_id, P.phone

HAVING COUNT(R.profile\_id)>1 ;

1. Write a query to find the rent generated from each city and also the total of all cities.

Query:

SELECT CASE

WHEN GROUPING(P.city) = 1

THEN 'Total'

ELSE [city]

END [city], SUM(TH.rent) as total\_rent

FROM dbo.Profiles P

INNER JOIN dbo.Tenancy\_histories TH

ON P.profile\_id = TH.profile\_id

GROUP BY P.city WITH ROLLUP;

1. Create a view 'vw\_tenant'

find profile\_id,rent,move\_in\_date,house\_type,beds\_vacant,description and city of tenants

who shifted on/after 30th april 2015 and are living in houses having vacant beds and its address.

Query:

CREATE VIEW vw\_tenant AS(

SELECT TH.profile\_id, TH.rent, TH.Move\_In\_Date

, H.house\_type, H.beds\_vacant

, A.description, A.city, CONCAT(A.name,', ',A.description,', ',A.city,', ',A.pincode) AS address

FROM dbo.Tenancy\_histories TH

INNER JOIN dbo.Houses H

ON (TH.house\_id = H.house\_id AND move\_in\_date >= convert(date, '30 Apr 2015'))

INNER JOIN dbo.Addresses A

ON TH.house\_id = A.house\_id

WHERE H.beds\_vacant > 0);

1. Write a code to extend the valid\_till date for a month of tenants who have referred more than two times

Query:

SELECT profile\_id, DATEADD(MM, 1, valid\_till)

FROM dbo.Referrals

WHERE profile\_id in (

SELECT profile\_id

FROM dbo.Referrals

GROUP BY profile\_id

HAVING COUNT(\*)>2);

1. Write a query to get Profile ID, Full Name , Contact Number of the tenants along with a new column 'Customer Segment' wherein if the tenant pays rent greater than 10000, tenant falls in Grade A segment, if rent is between 7500 to 10000, tenant falls in Grade B else in Grade C

Query:

\*There is no specification about whether 10000 or 7500 are inclusive or not

That’s why I have included both in Grade B

SELECT P.profile\_id, P.first\_name+' '+P.last\_name as full\_name, P.phone, SUM(TH.rent) as total\_rent,

Customer\_Segment =

CASE

WHEN sum(TH.rent)>10000 THEN 'A'

WHEN sum(TH.rent)<=10000 AND sum(TH.rent)>=7500 THEN 'B'

ELSE 'C'

END

FROM dbo.Profiles P

INNER JOIN dbo.Tenancy\_histories TH

ON P.profile\_id = TH.profile\_id

GROUP BY P.profile\_id, P.first\_name+' '+P.last\_name, P.phone;

1. Write a query to get Fullname, Contact, City and House Details of the tenants who have not referred even once

Query:

SELECT P.first\_name+' '+P.last\_name as full\_name, P.phone, P.city, H.bhk\_type

FROM dbo.Tenancy\_histories TH

INNER JOIN dbo.Profiles P

ON TH.profile\_id = P.profile\_id

INNER JOIN dbo.Houses H

ON TH.house\_id = H.house\_id

WHERE TH.profile\_id NOT IN (

select distinct(profile\_id)

from dbo.Referrals);

1. Write a query to get the house details of the house having highest occupancy

Query:

SELECT TOP 1 WITH TIES \*

FROM dbo.Houses

ORDER BY (bed\_count-beds\_vacant) DESC;