Creating Tables

--Profiles

create table Profiles(

profile\_id int NOT NULL identity(1,1),

first\_name varchar(255),

last\_name varchar(255),

email varchar(255) NOT NULL,

phone varchar(255) NOT NULL,

[city(hometown)] varchar(255),

pan\_card varchar(255),

created\_at date NOT NULL,

gender varchar(255) NOT NULL,

referral\_code varchar(255),

marital\_status varchar(255),

constraint pk\_profileID primary key(profile\_id))

--Houses

create table Houses(

house\_id int NOT NULL identity(1,1),

house\_type varchar(255),

bhk\_details varchar(255),

bed\_count int NOT NULL,

furnishing\_type varchar(255),

Beds\_vacant int NOT NULL,

constraint pk\_houseID primary key(house\_id))

--Tenancy\_histories

create table Tenancy\_histories(

id int NOT NULL identity(1,1),

profile\_id int NOT NULL,

house\_id int NOT NULL,

move\_in\_date date NOT NULL,

move\_out\_date date,

rent int NOT NULL,

Bed\_type varchar(255),

move\_out\_reason varchar(255),

constraint pk\_id primary key(id),

constraint fk\_tenantID\_profileID foreign key(profile\_id) references profiles(profile\_id),

constraint fk\_tenantHouseID\_HouseID foreign key(house\_id) references Houses(house\_id))

--Addresses

Create table Addresses(

ad\_id int NOT NULL identity(1,1),

name varchar(255),

description text,

pincode int,

city varchar(255),

house\_id int NOT NULL,

constraint pk\_ad\_id primary key(ad\_id),

constraint fk\_houseID\_Houses foreign key(house\_id) references Houses(house\_id))

--Referrals

create table Referrals(

ref\_id int NOT NULL identity(1,1),

profile\_id int NOT NULL,

referrer\_bonus\_amount float,

referral\_valid tinyint,

valid\_from date,

valid\_till date,

constraint pk\_refID primary key(ref\_id),

constraint fk\_profileID\_profile\_ProfileID foreign key(profile\_id) references Profiles(profile\_id))

--Employment\_details

create table Employment\_details(

id int NOT NULL identity(1,1),

profile\_id int NOT NULL,

latest\_employer varchar(255),

official\_mail\_id varchar(255),

yrs\_experience int,

Occupational\_category varchar(255),

constraint pk\_id\_employement primary key(id),

constraint fk\_profileID\_Employement\_profiles\_ProfileID foreign key(profile\_id) references Profiles(profile\_id))

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

select top 1 th.profile\_id,first\_name+' '+last\_name as FullName,phone,datediff(DD,move\_in\_date,move\_out\_date) as days\_stayed

from [Tenancy History] th

inner join

Profiles p

on

th.profile\_id=p.profile\_id

order by days\_stayed desc

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

select first\_name+' '+last\_name as fullname,email\_id,phone from Profiles

where profile\_id

IN

(select profile\_id from [Tenancy History] where rent >9000)

And

marital\_status='Y'

3. 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

select p.profile\_id, first\_name+' '+last\_name as full\_name, email\_id,city,house\_id,move\_in\_date ,move\_out\_date,rent,

isnull(sum(referral\_valid),0) as totalreference,latest\_employer,occupational\_category

from Profiles p

inner join [Tenancy History] th on p.profile\_id = th.profile\_id

inner join [Employment Status] es on p.profile\_id = es.profile\_id

left join Referral r on p.profile\_id = r.profile\_id

where city IN ('Bangalore','Pune') and

move\_in\_date between '2015-01-01' and '2016-01-31'

group by p.profile\_id,first\_name,last\_name,email\_id,city,house\_id,move\_in\_date ,move\_out\_date,rent,

latest\_employer,occupational\_category

order by rent desc

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

select first\_name+' '+last\_name as fullname,email\_id,phone,sum(referrer\_bonus\_amount) as total\_bonus,referral\_code

from Referral r

inner join Profiles p on r.profile\_id=p.profile\_id

where referral\_valid=1

group by r.profile\_id,first\_name,last\_name,email\_id,phone,referral\_code

having count(\*) >1

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

select distinct(city),sum(rent)over(partition by city) as rent

from Addresses a

inner join [Tenancy History] th on th.house\_id=a.house\_id

union all

select null,sum(rent) from [Tenancy History]

6.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.

select p.profile\_id,rent,move\_in\_date,house\_type,beds\_vacant, description, p.city,

name+' '+a.city as address,pincode

from Houses h

inner join [Tenancy History] th on th.house\_id=h.house\_id

inner join Profiles p on p.profile\_id=th.profile\_id

inner join Addresses a on h.house\_id = a.house\_id

where beds\_vacant>0 and move\_in\_date>'2015-04-30'

7. Write a code to extend the valid\_till date for a month of tenants who have referred more

than two times

select dateadd(month,1,valid\_till) as extended\_validity

from referral where profile\_id

in

(select profile\_id from Referral

group by profile\_id

having count(\*)>2)

8. 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

select p.profile\_id,first\_name+' '+last\_name as fullname,phone,

case

WHEN rent > 10000 THEN 'Grade A'

WHEN rent >= 7500 and rent <= 10000 THEN 'Grade B'

ELSE 'Grade C'

END as [Customer segment]

from [Tenancy History] th

inner join Profiles p on p.profile\_id=th.profile\_id

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

select p.profile\_id,first\_name+' '+last\_name as fullname,email\_id,phone,bed\_type,rent

from [Tenancy History] th

inner join Profiles p on p.profile\_id= th.profile\_id

inner join Houses h on h.house\_id=th.house\_id

where p.profile\_id

not in

(select profile\_Id from referral)

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

update [Tenancy History]

set move\_out\_date=GETDATE()

where move\_out\_date is NULL

select top 1 th.house\_id,bed\_type, move\_in\_date,

isnull(move\_out\_date,GETDATE()) as move\_out\_date,

datediff(DD,move\_in\_date,move\_out\_date) as days\_stayed,bed\_count,furnishing\_type,bhk\_type

from [Tenancy History] th

inner join

Houses h

on

th.house\_id=h.house\_id

order by days\_stayed desc