## **Assignment 2**

## WASIM RAZA

```
create database assignment2
use assignment2
---Q1 SOLUTION
select *from pets
select age from pets group by age ---a
select count(distinct age) from pets
select gender,age from pets group by gender,age ---b
select name from pets where name like '%u%' ---c
select kind, count(*) from pets group by kind ---d
select kind,avg(age) as avg_age from pets group by kind ---e
select *from pets where gender='female' and kind='dog' ---f
select kind,gender,count(*) from pets group by kind, gender ---g
select *from pets order by gender, age desc ---h
select kind from pets group by kind having max(age)>13 ---i
select top 15 *from pets ----j
select name from pets where name like '
select count(distinct age) from pets ----1
select age from pets where age between 5 and 15 ---m
---02 SOLUTION
select*from employees
select email, len(email) as email len from employees---a
select department_id,count(*) from employees group by department_id---b
select employee_id, datediff(year,hire_date,getdate()) as ewy from employees---c
select salary, 'salary_bucket'=case when salary<=7000 then 'low'
                                   when salary between 7000 and 20000 then 'medium'
                                   when salary>=20000 then 'high' end from employees;---d
select email, replace(email, 'sqltutorial.org', 'abccompany.com') as 'replaced_email' from
employees---e
select first_name,last_name, first_name + ' ' + last_name as full_name from employees;
select first_name,last_name, concat(first_name,' ',last_name) as full_name from
employees; ---f
select *into emp1 from employees where salary between 7000 and 16000;---g
select*from emp1
select *into emp2 from employees where manager_id in (100,114);----h
select*from emp2
select employee id,first name,last name from emp1---i
except
select employee_id,first_name,last_name from emp2
---Q3
---Having and Where both used for the filtering data and we can use both where and having
in same query, the only difference is where cannot be used for aggregate function
---04
---UNION: it's only keeps the unique records and does not allow duplicate
---UNION ALL: it's allow duplicate show all records from both the tables
---05
---Select Sum(Null), Count(Null); operand data type null is invalid for sum and count
operater
---Select substring('Prepleaf',0,0); Null
---Select Coalesce(Null, Null, 3); 3
```

## WASIM RAZA

```
SQLQuery2.sql - L...D0PKDF\iamra (62))* 😕 🗙
                                    □create database assignment2
Connect ▼ ¥ ■ ▼ C →
                                      use assignment2
■ LAPTOP-67D0PKDF\WASIM (SQL Sen
                                      ---01 SOLUTION

□ ■ Databases

                                      select *from pets
   select age from pets group by age ---a
                                      select count(distinct age) from pets

    □ Database Snapshots

    ■ assignment2

                                      select gender,age from pets group by gender,age ---b

    ■ Database Diagrams

                                      select name from pets where name like '%u%' ---c
     select kind, count(*) from pets group by kind ---d
       select kind,avg(age) as avg_age from pets group by kind ---e
       select *from pets where gender='female' and kind='dog' ---f
       select kind, gender, count(*) from pets group by kind, gender ---g
       select *from pets order by gender, age desc ---h
       □ Ⅲ dbo.emp1
                                      select kind from pets group by kind having max(age)>13 ---i
                                      select top 15 *from pets ----j
         select name from pets where name like '____
select count(distinct age) from pets ----1
         select age from pets where age between 5 and 15 ---m
         ---02 SOLUTION
         select*from employees
       select email, len(email) as email_len from employees---a
         select department_id,count(*) from employees group by department_id---b

    ■ Kevs
                                      select employee_id, datediff(year,hire_date,getdate()) as ewy from employees---c
         select salary,'salary_bucket'=case when salary<=7000 then 'low'
         when salary between 7000 and 20000 then 'medium'
         when salary>=20000 then 'high' end from employees;---d
         select email,replace(email,'sqltutorial.org','abccompany.com') as 'replaced_email' from employees---e select first_name,last_name, first_name + ' ' + last_name as full_name from employees;

    ⊞ dbo.pets
                                      select first_name,last_name, concat(first_name,' ',last_name) as full_name from employees;---f
     select *into emp1 from employees where salary between 7000 and 16000;---g
     select*from emp1
     select *into emp2 from employees where manager_id in (100,114);----h

    ■ Programmability

                                      select*from emp2

    Service Broker

                                      select employee_id,first_name,last_name from emp1---i
     100 %

    □ hello world

    Query executed successfully.

                                                                                                                                I APTOP-
                                SQLQuery2.sql - L...D0PKDF\iamra (62))* 😕 🗙
                                   select salary, 'salary_bucket'=case when salary<=7000 then 'low
Connect ▼ * ♥ ■ ▼ ♂ ♣
                                                                    when salary between 7000 and 20000 then 'medium'

□ ■ LAPTOP-67D0PKDF\WASIM (SQL Sen)

                                                                    when salary>=20000 then 'high' end from employees;---d

☐ ■ Databases
                                    select email,replace(email,'sqltutorial.org','abccompany.com') as 'replaced_email' from employees---e
select first_name,last_name, first_name + ' ' + last_name as full_name from employees;
   select first_name,last_name, concat(first_name,' ',last_name) as full_name from employees;---f

    ■ assignment2

                                    select *into emp1 from employees where salary between 7000 and 16000;---g
     select*from emp1

☐ I Tables
                                    select *into emp2 from employees where manager_id in (100,114);----h

    ⊞   
    ■ System Tables
       select employee_id,first_name,last_name from emp1---i
       select employee_id,first_name,last_name from emp2

    ⊞ dbo.emp1

         ---Having and Where both used for the filtering data and we can use both where and having in same query,
         ---the only difference is where cannot be used for aggregate function
         ---UNION: it's only keeps the unique records and does not allow duplicate
       ---UNION ALL: it's allow duplicate show all records from both the tables
         ---Select Sum(Null), Count(Null); operand data type null is invalid for sum and count operater
         ---Select substring('Prepleaf',0,0); Null
         ---Select Coalesce(Null,Null,3);

    ⊞ dbo.emplovees

    ■ Synonyms

    ■ Service Broker

    ■ Storage

    ■ Security
                                hello world
                                                                                                                           LAPTOP-67D0PK
```