**Group Daily Report**

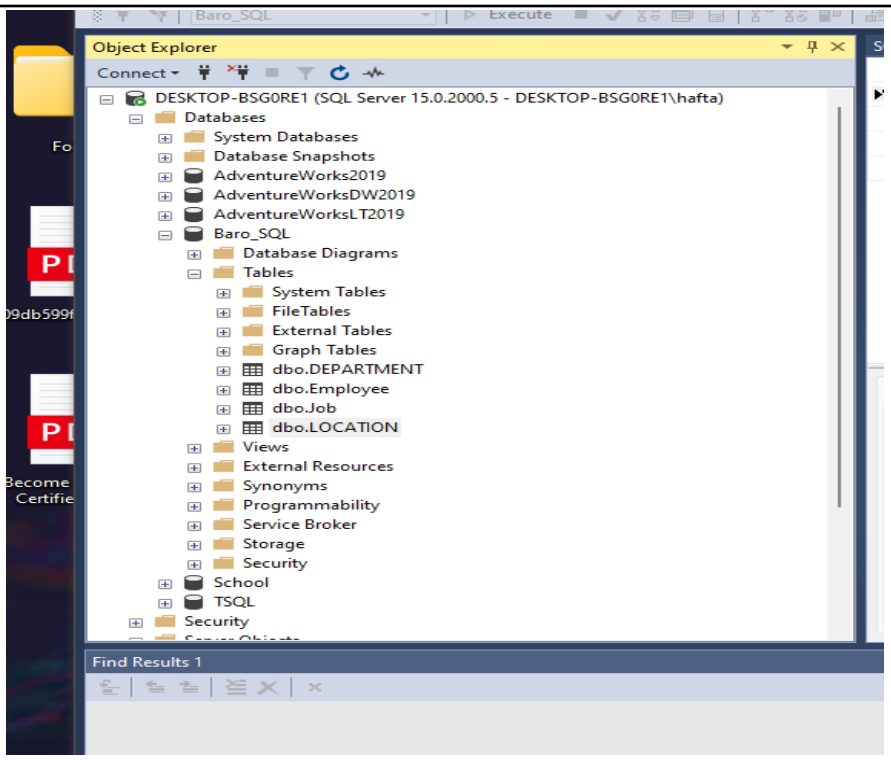
**Group Members [Group Leader at the top]**

| Name |
|---|
| Frehiwot Mengistie |
| Eliyam Wondmeneh |
| Efrem Kifle |
| Haftamu Molla |

**Agenda**

| # | Topic | Chapter |
|---|---|---|
| 1. | Create a database called Baro_SQL and then the Following Tables and populate the table with the data accordingly. | |
| 2. | Simple Queries | |
| 3. | 'where' condition | |
| 4. | Order by clause | |
| 5. | group by and having clause | |
| 6. | Joins | |
| 7 | Set Operators | |
| 8 | Set Queries | |

**Detailed Breakdown**

| Topic # | Create a database called Baro_SQL and then<br>the Following Tables and populate the table with the data<br>accordingly. |
|---|---|
| 1. | •  |
| | • |
| | • |
| | • |
| | • |

```
/*Group-1 final T-SQL PROJECT
Group member name
 1,Frehiwot Mengistie
 2,Efrem Kifle
 3,Haftamu Molla
 4,Eliyam Wondmeneh

 Date:-05/03/2023
  */


create database Baro_SQL
USE Baro_SQL
GO

create table LOCATION
 (Location_Id  int primary key,
  City varchar(30));
insert into LOCATION
values  (122,'New York'),
        (123, 'Dallas'),
               (124, 'Chicago'),
               (167, 'Boston')

create table DEPARTMENT
  (Department_Id int primary key identity(10,10),
   Name Varchar(50),
   Location_Id int foreign key(Location_Id)references Location(Location_Id))
insert into DEPARTMENT
values ('Accounting',122),
       ('Sales',124),
              ('Research',123),
              ('Operations',167)

create table Job
(Job_Id  int primary key identity(667,1)  , Designation Varchar(50))
insert into Job
Values ('Clerk'),
       ('Staff'),
              ('Analyst'),
              ('SalesPerson'),
              ('Manager'),
```

```
('President')



Create table Employee
(Employee_Id int,
LastName varchar(50),
FirstName Varchar(50),
MiddleName varchar(50),
Job_Id int foreign key(Job_id) references Job (job_Id),
Manager_Id int,
HireDate date,
salary money,
Comm money null,
Department_Id int Foreign key
(Department_Id) references department(Department_Id)

)
Insert into Employee
values(7369,'Smith','John','Q',667,7902,'1984-12-17',800,NULL,20),
    (7499,'Allen','Kevin','J',670,7698,'1985-02-20',1600,300,30),
        (7505,'Doyle','Jean','K',671,7839,'1985-04-04',2850,NULL,30),
        (7506,'Dennis','lynn','S',671,7839,'1985-05-15',2750,NULL,30),
        (7507,'Baker','Leslie','D',671,7839,'1985-06-10',2200,NULL,40),
            (7521,'Wark','Cynthia','D',670,7698,'1985-02-22',1250,500,30)

            --simple queries:
            --1,
Select*
From Employee
--2
Select*
From DEPARTMENT
--3
Select*
From job
--4
Select*
From LOCATION
--5
Select FirstName,LastName,Salary,comm
From Employee
--6
Select Employee_id as 'id of employee',LastName as name,
```

```
Department_Id as 'dep_id'
From Employee
--7
Select FirstName,LastName,sum(12*Salary)
as 'Annual salary'
From employee
Group by FirstName,LastName

--‘Where’ condition:
--1,
Select*
From Employee
Where lastName='Smith'
--2,
Select*
From Employee
Where department_id=20
--3,
Select*
From employee
Where salary between 3000 and 4500
--4,
select*
From employee
Where department_id IN(10,20)
--5,
Select*
From Employee
Where department_id not in(10,30)
--6,
Select*
From employee
Where LastName like 'S%'
--7,
select*
From Employee
Where LastName like 'S%h'
--8,
Select*
From Employee
Where LastName like 'S___'
--9,
Select *
From employee
```

```
Where department_Id=10 and salary>3500
--10,
Select*
From Employee
Where comm is null

--order by clause:
--1,
select employee_id,LastName
From employee
order by employee_id
--2,
Select employee_id,FirstName,LastName
From Employee
Order by  salary desc
--3,
select*
From Employee
order by lastName asc,salary desc
--4,
select*
From Employee
order by lastName asc,Department_Id desc

--group by & having clause
--1,
select Department_id, count(department_id)
as 'TotalInDepartment'
From employee
Group by Department_Id
--2,
select Department_id,max(salary) as MaximumSalary,
      Min(Salary) as MinimumSalary,avg(Salary)
            as avrageSalary
            from employee
            Group by Department_Id
--3,
select Job_Id,max(salary) as MaximumSalary,
      Min(Salary) as MinimumSalary,avg(Salary) as avrageSalary
            from employee
            Group by Job_Id
--4,
Select DATENAME(Month,HireDate) as month,
count(Datename(month,hireDate)) AS month_wise
```

```
from Employee
group by DATENAME(month,HireDate)


--5,
select concat(Datename(month,HireDate) ,
datepart(year,HireDate))as year_month,
count(Datename(month,hireDate)) AS month_year_wise
from Employee
Group by DATENAME(month,HireDate),
datepart(year,HireDate)

--6,
select Department_Id,
count(*) as department_count
from employee
group by Department_Id
having count(*)>=4
--7,
select count(employee_id) as JanuaryHired
from Employee
where DATENAME(month,Hiredate)='January'
Group by hiredate,employee_id

--8,
select count(employee_id) as JanuaryAndSept
from Employee
where DATENAME(month,Hiredate)
in('January','September')
Group by hiredate,employee_id
--9,
--9. how many employees were joined in 1985.
select count(employee_id) as year1985
from Employee
where DATENAME(YEAR,Hiredate)='1985'
Group by DATENAME(YEAR,Hiredate)

--10,
select concat(Datename(month,HireDate) ,
datepart(year,HireDate))as year1985,
count(Datename(month,hireDate))
AS Hired_year1985_wise
from Employee
where DATEPART(year,HireDate)=1985
```

```
Group by DATENAME(month,HireDate),
datepart(year,HireDate)

--11,
select concat(Datename(month,HireDate) ,
datepart(year,HireDate))as year1985,
count(Datename(month,hireDate))
AS month_year1985_wise
from Employee
where Datename(MONTH,HireDate)='march'
and datepart(year,HireDate)=1985
Group by DATENAME(month,HireDate),
datepart(year,HireDate)
--12,

select Department_Id
from employee
where Datename(month,hiredate)='april'
and DATEPART(year,hiredate)=1985
and Department_Id>=3


--joins

Select*
 From Employee
 Select*
 From DEPARTMENT
 Select*
 From job
 Select*
 From LOCATION

where Designation='manager'
--1,
select firstName,LastName,d.name
from employee E
INNER JOIN department d
ON d.department_id=E.Department_Id
--2,
select firstName,LastName,Designation
from employee E
INNER JOIN JOB J ON J.job_id=e.Job_Id
--3
```

```
select firstName,LastName,d.name as
departmentName,City
from employee E
INNER JOIN department d ON
d.department_id=E.Department_Id
INNER JOIN location l on
l.location_id=d.Location_Id
--4
select count(e.department_id)
as numberOfemployee,name
from DEPARTMENT d
INNER JOIN Employee e
on e.department_id=d.Department_Id
group by e.Department_Id,name
--5,
select count(e.department_id) as
salesEmployee,d.name
from employee e
INNER JOIN Department d
on e.department_id=d.Department_Id
group by d.name
having d.name='sales'

--6,
select count(E.Department_Id)
as employeeCount,d.name
from employee e
INNER JOIN DEPARTMENT D
ON D.Department_Id=E.Department_Id
group by d.Name
Having count(*)>=5
order by d.Name



 --7,
 select count(e.job_id) as jobsInOrganazation,
 j.Designation
 from Employee E
INNER JOIN  JOB J ON E.job_id=j.Job_Id
Group by j.designation

 --8,
 Select count(d.location_id) as Newyorkers
```

```
 from department d
 INNER JOIN location l ON
 d.Location_Id=l.Location_Id
 group by City
 Having city='New york'

 --9,
SELECT FirstName,LastName,salary,
RANK() OVER(ORDER BY SALARY DESC) AS Grade
from Employee
--10,
select count(employee_id) salaryGradeCount
from Employee
group by salary
--11
SELECT FirstName,LastName,
RANK() OVER(ORDER BY SALARY DESC) AS Grade,
count(employee_id) AS NoOfEmployee
from Employee
Group by salary,FirstName,LastName
having salary between 2000 and 5000
--12,
select e.firstname,e.lastname,q.employee_id,
q.manager_id
from Employee e,Employee q
SELF JOIN on e.employee_id=e.manager_id
where


select e.firstname as employeeName,
m.firstname as managerName
from Employee e
left outer join Employee m
on e.Manager_Id=m.Employee_Id

--There supposed be one more table that shows manager
--and employee relation
--13
--14
--15
--16

select firstName,LastName,d.name
from employee e
```

```
INNER JOIN DEPARTMENT D
ON E.DEPARTMENT_ID=D.DEPARTMENT_ID
group by FirstName,LastName,D.Name,e.Department_Id
HAVING e.department_id in(20,40)

--set operators
--1,
select distinct job_id
from employee
Where department_id in(10,20)
--2,
select job_id,FirstName,LastName
from employee
Where department_id in(10,20)


--3,
select job_id
from employee
where Department_Id in (30,10)
intersect
select job_id
from job

select*from job
select*from DEPARTMENT
select*from Employee



--sub queries
--1,
select *
from employee
Where salary =(select max(salary) from Employee )


--2,

select*from employee
where department_id
in(select department_id
from DEPARTMENT where name='sales')
```

```
--3
select*from Employee
where job_id in(select job_id from employee
where job_id=667)
select*from DEPARTMENT
select*from location
select*from Employee


 --4
 select firstname,lastname,city,d.department_id,
 l.location_id from Employee e
 inner join department d on
 d.department_id=e.department_id
 inner join location l on
 l.location_id=d.Location_Id
 where exists (select city from location where
 l.Location_Id=122)
 --5
 select count(department_id)
 as salesemployee from Employee
 where Department_Id
 in( select department_id
 from employee
 where department_id=20)
 --6,
 UPDATE Employee
 SET salary=(select salary+(select salary*.1))
 where Job_Id=667
 --7,
 delete Employee
 where department_id=10
 --8,

select max(salary)as secondHighest  from Employee
where salary<(select max(salary) from Employee)

--9
select top 1 *from(select firstname,
lastname,salary,
DENSE_RANK()over(order by salary DESC)AS
NthHighestSalary from Employee)employee
```

```
--10
select top 1 *from(select firstname,
lastname,salary,
DENSE_RANK()over(order by salary DESC)AS
NthHighestSalary from Employee
where department_id=30)employee


--11,
select top 1 *from(select firstname,
lastname,salary,
DENSE_RANK()over(order by salary asc)AS
NthHighestSalary from Employee where
department_id=30)employee

--12,
select name from department
where name not in
(select d.name from department d
inner join employee e on
d.Department_Id=e.Department_Id)



--13,
select name from department
where name not in
(select d.name from department d
inner join employee e
on d.Department_Id=e.Department_Id)

--14,
select firstname,department_id,salary from
employee where salary>(select avg(salary)
as avrageSalary
from Employee )
group by firstname,
Department_Id,salary

----completed------
```