

BCIS5420.003 Assignment-3 Team 27

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Date: 4/2/2023,4/1/2023

Create Table Queries:

```
create Table DT_Vendor(  
    Vendor_Id Varchar(20),  
    Vendor_Name Varchar(50),  
    Vendor_Address VarChar(60),  
    Primary Key (Vendor_Id));
```

```
Create Table DT_Department(  
    Dept_Name varchar(20),  
    Dept_Phone varchar(12)  
    Primary Key (Dept_Name)  
);
```

```
Create Table DT_BuysFrom(  
    Vendor_Id VarChar(20),  
    Dept_Name Varchar(20),  
    Primary Key (Vendor_Id , Dept_Name),  
    Foreign Key (Vendor_Id) References DT_Vendor(Vendor_Id),  
    Foreign Key (Dept_Name) References DT_Department(Dept_Name));
```

```
Create Table DT_Skill(  
    Skill_No varchar(10),  
    Skill_Description varchar(50),  
    Primary Key (Skill_No));
```

```
Create Table DT_Project(  
    Proj_No varchar(10),  
    Project_Name varchar(50),  
    Proj_Est_Cost integer,  
    Primary key (Proj_No));
```

```
Create Table DT_Employee(  
    Emp_No Varchar(10),  
    EmpFirstName Varchar(20),  
    EmpLastName Varchar(20),  
    Emp_Title Varchar(25),  
    Emp_DoB date,  
    Primary Key (Emp_No));
```

```
Create Table DT_Location(  
    Loc_id varchar(10),  
    Loc_city varchar(20),  
    Loc_state varchar(2),  
    Loc_Population varchar(10),  
    Primary Key (Loc_id));
```

```
Create Table DT_BelongsTo(  
    Emp_No varchar(10),  
    Dept_Name Varchar(20),  
    Primary Key (Emp_No,Dept_Name),  
    Foreign Key (Emp_No) references DT_Employee(Emp_No),  
    Foreign Key (Dept_Name) references DT_Department(Dept_Name));
```

```
Create Table DT_AssignedTo(  
    Emp_No varchar(10),
```

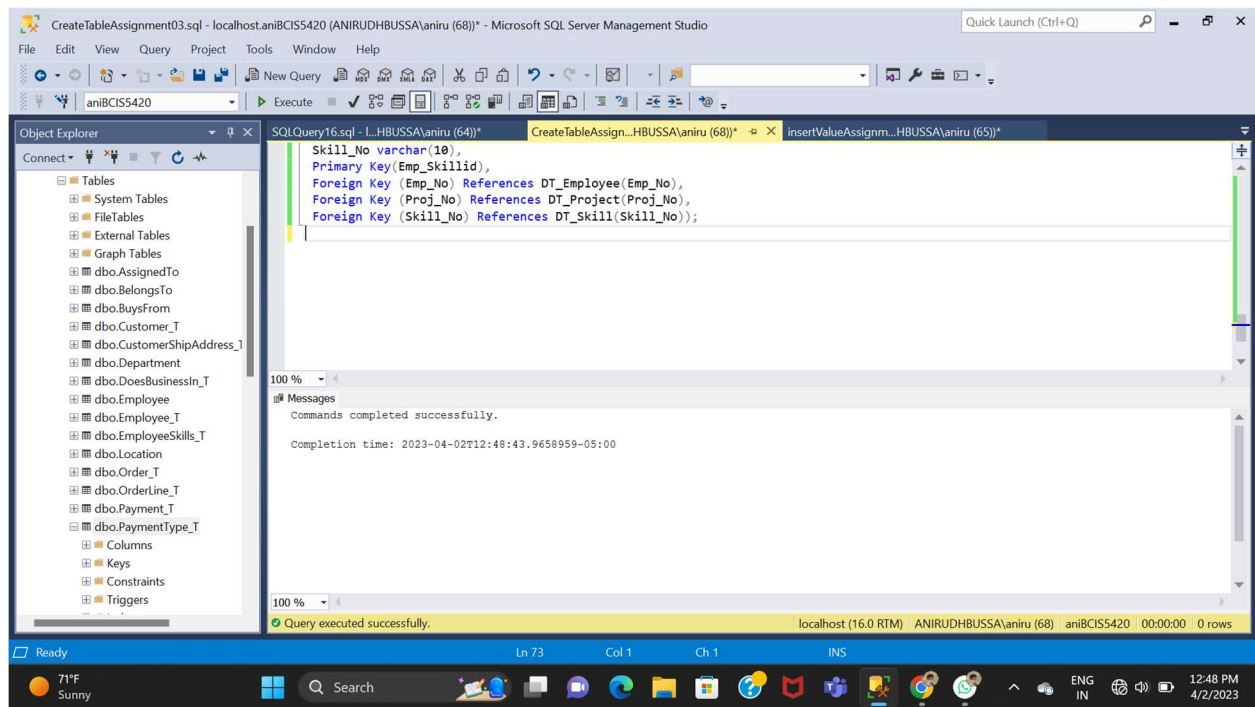
```

Proj_No varchar(10),
Loc_id varchar(10),
Primary Key (Emp_No,Proj_No ,Loc_id),
Foreign Key (Emp_No) References DT_Employee(Emp_No),
Foreign Key (Proj_No) References DT_Project(Proj_No),
Foreign Key (Loc_id) References DT_Location(Loc_id));

Create table DT_EmpSkills(
Emp_Skillid varchar(10),
Emp_No varchar(10),
Proj_No varchar(10),
Skill_No varchar(10),
Primary Key(Emp_Skillid),
Foreign Key (Emp_No) References DT_Employee(Emp_No),
Foreign Key (Proj_No) References DT_Project(Proj_No),
Foreign Key (Skill_No) References DT_Skill(Skill_No));

```

Result:



Insert Sql queries for the tables:

```
insert into dbo.DT_Vendor Values
('V001','John Smallings','232 sterling street'),
('V002','James Reeces','5662 Woodlane Avenue'),
('V003','Jack Evans','112 Chestnut Street'),
('V004','Chris Gasling','89 Teasley Lane'),
('V005','Joe Rogan','342 West Avenue'),
('V006','Daniel White','555 Manhattan Street'),
('V007','Adam Skies','133 South loop');
```

```
insert into dbo.DT_Department values
('Finance','8936719990'),
('Sales','8990181001'),
('HR','1231200190'),
('Marketing','2133889010'),
('IT Dept','8920108100'),
('Customer Care','7829001001'),
('Board','6789001010');
```

```
insert into dbo.DT_BuysFrom values
('V001','Finance'),
('V002','Sales'),
('V001','Marketing'),
('V003','HR'),
('V004','IT Dept'),
('V003','Customer Care'),
('V005','Sales');
```

```
insert into dbo.DT_Skill values
('1','Writing Skill'),
('2','Report Writing'),
('3','Good Excel Skills'),
('4','Documentation Skills'),
('5','Strategical Marketing'),
('6','Accounting Skills'),
('7','Tally Skills');
```

```
insert into dbo.DT_Project values
('PR001','Product Marketing',140000),
('PR002','Adverstiment Research',200000),
('PR003','Employee Recuritment',100000),
('PR004','Auditing',250000),
('PR005','Inventory Managment',200000),
('PR006','Sales Management',500000),
('PR007','Vendor Management',350000);
```

```
insert into dbo.DT_Employee values
('100','Mark','Myers','Marketing Manager','1980-04-20'),
('110','Anna','Franklin','Junior Marketing person','1996-05-05'),
('120','Greg','Bushman','Sr. Marketing Head','1986-11-24'),
('200','John','Clarke','HR Manager','1989-12-12'),
('300','Jackson','Wang','Sales Manager','1990-01-23'),
('301','Chris','Evans','Junior Sale person','1999-03-14'),
('401','Shane','Watson','Finance Manager','1978-07-12'),
('210','Chris','Gayle','Junior Hr Assitant','1995-04-20');
```

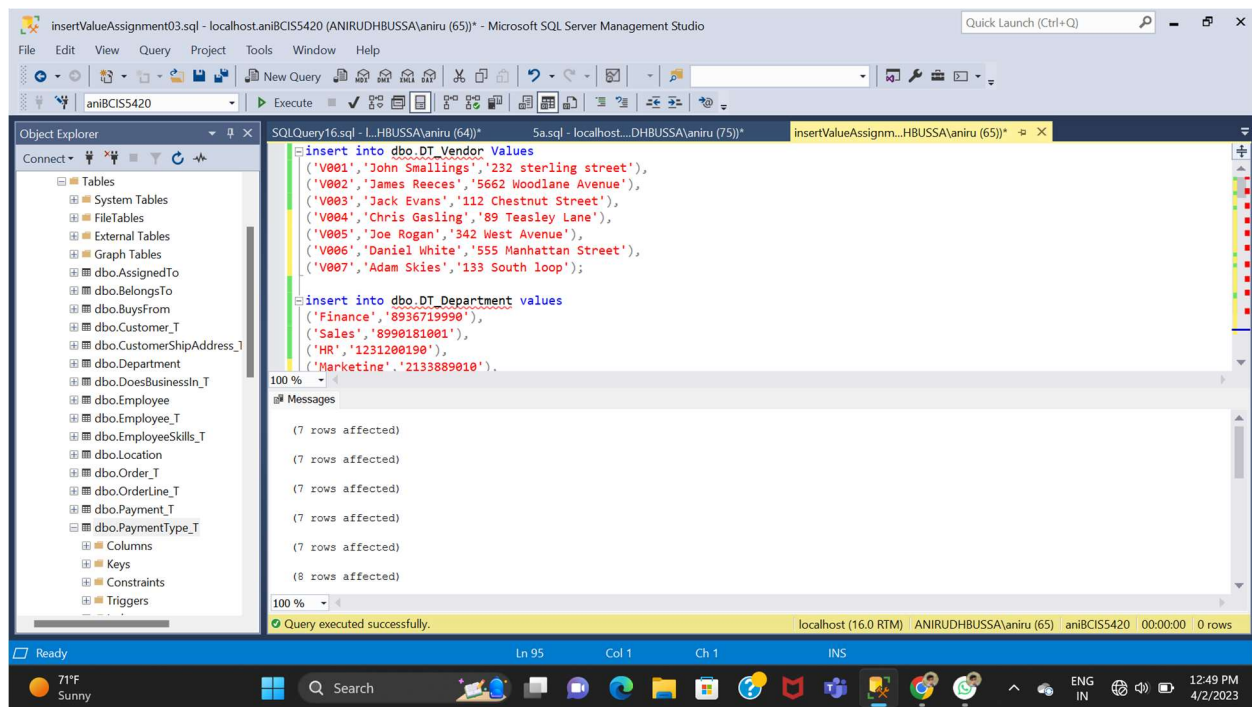
```
insert into dbo.DT_Location values
('001','Denton','TX','300,000');
```

```
('002','Irving','TX','350,000'),
('003','Dallas','TX','400,000'),
('004','Chicago','IL','1,200,000'),
('005','Califorina','LA','2,500,000'),
('006','Houston','TX','220,000'),
('007','Austin','TX','400,000');
```

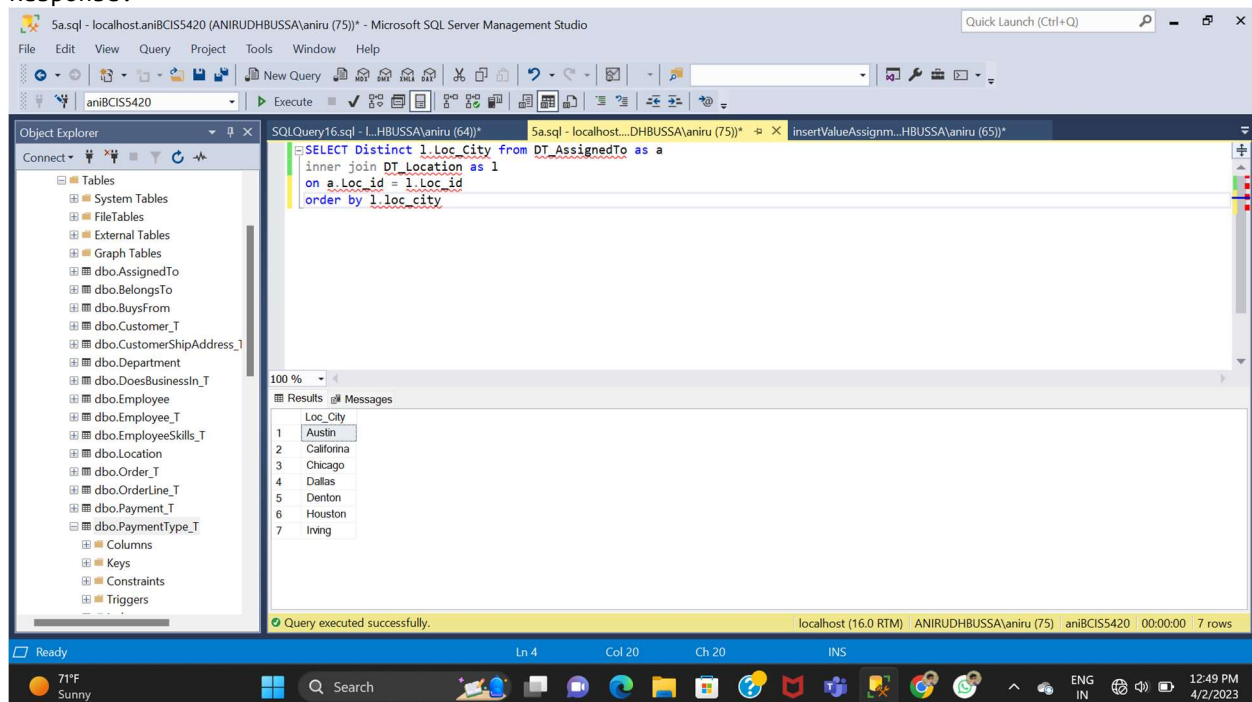
```
insert into dbo.DT_BelongsTo values
('401','Finance'),
('100','Marketing'),
('110','Marketing'),
('120','Marketing'),
('200','HR'),
('300','Sales'),
('301','Sales');
```

```
insert into dbo.DT_AssignedTo values
('100','PR001','001'),
('110','PR001','001'),
('120','PR002','002'),
('200','PR003','004'),
('300','PR005','006'),
('301','PR006','003'),
('401','PR004','005'),
('210','PR007','007');
```

```
insert into dbo.DT_EmpSkills values
('Sk001','100','PR001','1'),
('Sk002','100','PR001','2'),
('Sk003','100','PR001','5'),
('Sk004','110','PR001','3'),
('Sk005','120','PR002',Null),
('Sk006','200','PR003','1'),
('Sk007','401','PR004','6'),
('Sk008','300','PR005','4'),
('Sk009','301','PR006','5'),
('Sk010','210','PR007','2');
```



5a. `SELECT Distinct l.Loc_City from DT_AssignedTo as a
 inner join DT_Location as l
 on a.Loc_id = l.Loc_id
 order by l.loc_city`
 Response:



5b. `Select e.emp_no,e.skill_no,p.project_name from DT_EmpSkills as e`

```
inner join DT_Project as p
on p.proj_no = e.proj_no
where e.skill_no in ('1','2','3')
```

Response :

The screenshot shows the Microsoft SQL Server Management Studio interface. The query window displays the following SQL query:

```
Select e.emp_no, e.skill_no, p.project_name from DT_EmpSkills as e
inner join DT_Project as p
on p.proj_no = e.proj_no
where e.skill_no in ('1','2','3')
```

The Results pane shows the following data:

emp_no	skill_no	project_name
100	1	Product Marketing
100	2	Product Marketing
110	3	Product Marketing
200	1	Employee Recruitment

The status bar indicates the query was executed successfully on localhost (16.0 RTM) at 12:49 PM on 4/2/2023.

```
5c: select EmpFirstName, EmpLastname from DT_Employee
where (EmpLastname Like '%a' or EmpLastname Like '%i' or EmpLastname Like '%o' or
EmpLastname Like '%u' or EmpLastname Like '%e') and EmpLastname not like '%y'
```

Response:

The screenshot shows the Microsoft SQL Server Management Studio interface. The query window displays the following SQL query:

```
select EmpFirstName, EmpLastname from DT_Employee
where (EmpLastname Like '%a' or EmpLastname Like '%i' or EmpLastname Like '%o' or
EmpLastname Like '%u' or EmpLastname Like '%e') and EmpLastname not like '%y'
```

The Results pane shows the following data:

EmpFirstName	EmpLastname
John	Clarke
Chris	Quayle

The status bar indicates the query was executed successfully on localhost (16.0 RTM) at 12:59 PM on 4/2/2023.

```

5d. select e.EmpLastName as LastName, p.Project_name as ProjectName from DT_Assignedto as a
inner join DT_Employee as e
on e.Emp_no = a.Emp_No
inner join DT_Project as p
on a.Proj_No = p.Proj_no
order by p.Project_Name Desc , e.EmpLastName ;

```

Response:

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor displays the following SQL query:

```

select e.EmpLastName as LastName, p.Project_name as ProjectName from DT_Assignedto as a
inner join DT_Employee as e
on e.Emp_no = a.Emp_No
inner join DT_Project as p
on a.Proj_No = p.Proj_no
order by p.Project_Name Desc , e.EmpLastName ;

```

The query has been executed successfully, and the results are displayed in the Results pane. The results show 8 rows of data:

1	2	3	4	5	6	7	8
1	2	3	4	5	6	7	8
Gayle	Vendor Management						
Evans	Sales Management						
Franklin	Product Marketing						
Myers	Product Marketing						
Wang	Inventory Management						
Clarke	Employee Recruitment						
Watson	Auditing						
Bushman	Adverstiment Research						

The status bar at the bottom indicates that the query was executed successfully on 4/2/2023 at 1:01 PM, returning 8 rows.

```

5e: Select EmpFirstName as FirstName , EmplastName as LastName from DT_EmpLoyee as e
inner join DT_AssignedTo as a
on e.Emp_No = a.Emp_no
where a.Proj_no in (
Select a.proj_no from DT_EmpLoyee as e
inner join DT_AssignedTo as a
on e.Emp_No = a.Emp_no
where e.EmpFirstName = 'Mark' and e.EmpLastName = 'Meyers') and e.EmpFirstName <> 'Mark'
and e.EmplastName <> 'Meyers'

```


Response:

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor contains the following SQL code:

```
Select EmpFirstName as FirstName , EmpLastName as LastName from DT_Employee as e
inner join DT_AssignedTo as a
on e.Emp_No = a.Emp_no
where a.Proj_no in (
Select a.Proj_no from DT_Employee as e
inner join DT_AssignedTo as a
on e.Emp_No = a.Emp_no
where e.EmpFirstName = 'Mark' and e.EmpLastName ='Meyers') and e.EmpFirstName <> 'Mark' and e.EmpLastName <> 'Meyers'
```

The Results pane shows the following data:

FirstName	LastName
Anna	Franklin

The status bar indicates: Query executed successfully. localhost (16.0 RTM) ANIRUDHBUSSA\aniru (64) aniBCISS420 00:00:00 1 rows

5f: Select Proj_No ,Count(Emp_No) from DT_AssignedTo
Group by Proj_No

Response:

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor contains the following SQL code:

```
Select Proj_No ,Count(Emp_No) from DT_AssignedTo
Group by Proj_No
```

The Results pane shows the following data:

Proj_No	(No column name)
PR001	2
PR002	1
PR003	1
PR004	1
PR005	1
PR006	1
PR007	1

The status bar indicates: Query executed successfully. localhost (16.0 RTM) ANIRUDHBUSSA\aniru (69) aniBCISS420 00:00:00 7 rows

```

5g: select Distinct v.Vendor_id , v.Vendor_name from DT_BuysFrom as b
Right outer join DT_Vendor as v
on v.vendor_id = b.vendor_id
where b.Dept_Name is null

```

Response:

The screenshot shows the Microsoft SQL Server Management Studio interface. The query window displays the following SQL query:

```

select Distinct v.Vendor_id , v.Vendor_name from DT_BuysFrom as b
Right outer join DT_Vendor as v
on v.vendor_id = b.vendor_id
where b.Dept_Name is null

```

The Results pane shows the following data:

Vendor_id	Vendor_name
V006	Daniel White
V007	Adam Skies

The status bar at the bottom indicates "Query executed successfully." and "localhost (16.0 RTM) ANIRUDHBUSSA\aniru (70) aniBCISS420 00:00:00 2 rows".

```

5h: Select Emp_No , Count(Skill_No) as 'No of Skills'
from DT_EmpSkills
Group by Emp_no
Having Count(Skill_No) > 1

```

Response:

The screenshot shows the Microsoft SQL Server Management Studio interface. The query window displays the following SQL query:

```

Select Emp_No , Count(Skill_No) as 'No of Skills'
from DT_EmpSkills
Group by Emp_no
Having Count(Skill_No) > 1

```

The Results pane shows the following data:

Emp_No	No of Skills
100	3

The status bar at the bottom indicates "Query executed successfully." and "localhost (16.0 RTM) ANIRUDHBUSSA\aniru (81) aniBCISS420 00:00:00 1 rows".

```

5i: Select d.Dept_name from DT_BelongsTo as b
Right Outer join DT_Department as d
on d.Dept_Name = b.Dept_name
where b.Emp_No is Null

```

Response:

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor contains the following SQL query:

```

Select d.Dept_name from DT_BelongsTo as b
Right Outer join DT_Department as d
on d.Dept_Name = b.Dept_name
where b.Emp_No is Null

```

The query has been executed successfully, and the results are displayed in the Results pane. The results show three rows of data:

Dept_name
Board
Customer Care
IT Dept

The status bar at the bottom indicates that the query was executed successfully on 4/2/2023 at 1:04 PM.

```

5j: select Distinct Skill_Description from DT_Skill as s
inner join DT_EmpSkills as e
on e.Skill_No = s.Skill_No
Response:

```

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor contains the following SQL query:

```

select Distinct Skill_Description from DT_Skill as s
inner join DT_EmpSkills as e
on e.Skill_No = s.Skill_No

```

The query has been executed successfully, and the results are displayed in the Results pane. The results show six rows of data:

Skill_Description
Accounting Skills
Documentation Skills
Good Excel Skills
Report Writing
Strategical Marketing
Writing Skill

The status bar at the bottom indicates that the query was executed successfully on 4/2/2023 at 1:05 PM.