

CS6360.004 Fall 2019

Submitted by - Kapil Gautam (KXG180032)

Assignment 2 Solutions – Install a Database

Using SQL Server Management Studio

1. Connectivity to Company database and list of tables created :

The screenshot displays the Microsoft SQL Server Management Studio interface. The 'Registered Servers' pane on the left shows the 'KAPILGAUTAMIN' server. The 'Object Explorer' pane shows the 'Company' database with its tables listed. The 'Results' pane shows the execution of a script that created the database and its tables. The 'Properties' pane on the right shows the 'Aggregate Status' and 'Connection' details for the 'Company' database.

Registered Servers

- Database Engine
 - Local Server Groups
 - kapilgautamin
- Central Management Servers

Object Explorer

- KAPILGAUTAMIN (SQL Server 14.0)
 - Databases
 - System Databases
 - Database Snapshots
 - Company
 - Database Diagrams
 - Tables
 - System Tables
 - FileTables
 - External Tables
 - Graph Tables
 - dbo.DEPARTMENT
 - dbo.DEPT_LOCATIONS
 - dbo.EMPLOYEE
 - dbo.PROJECT
 - dbo.WORKS_ON
 - Views
 - External Resources
 - Synonyms
 - Programmability
 - Service Broker
 - Storage

Results

Run this script directly in the MySQL server query window it will automatically create the database and all the database objects.

6	Sales	8	555555500	1997-01-01	
essn	dependent_name	sex	bdate	relationship	
4	333445555	Alice	F	1976-04-05	Daughter
5	333445555	Joy	F	1948-05-03	Spouse
6	333445555	Theodore	M	1973-10-25	Son
7	444444400	Johnny	M	1997-04-04	Son
8	444444400	Tommy	M	1999-06-07	Son
9	444444401	Chris	M	1969-04-19	Spouse
10	444444402	Sam	M	1964-02-14	Spouse
11	987654321	Abner	M	1932-02-29	Spouse

dnumber	dlocation	
2	4	Stafford
3	5	Bellaire
4	5	Houston
5	5	Sugar...
6	6	Atlanta
7	6	Sacra...
8	7	Milwau...
9	8	Chicago

fname	minit	lname	ssn	bdate	address	sex	salary	superssn	dno	
1	Jared	D	James	111111100	1966-10-10	123 Peachtree, Atlanta, GA	M	85000.00	NULL	6
2	Jon	C	Jones	111111101	1967-11-14	111 Allgood, Atlanta, GA	M	45000.00	111111100	6
3	Justin	n	Mark	111111102	1966-01-12	2342 May, Atlanta, GA	M	40000.00	111111100	6
4	Brad	C	Knight	111111103	1968-02-13	176 Main St., Atlanta, GA	M	44000.00	111111100	6
5	John	B	Smith	123456789	1955-01-09	731 Fondren, Houston, TX	M	30000.00	333445555	5
6	Evan	E	Wallis	222222200	1958-01-16	134 Pelham, Milwaukee...	M	92000.00	NULL	7
7	Josh	U	Zell	222222201	1954-05-22	266 McGrady, Milwaukee...	M	56000.00	222222200	7
8	Andy	C	Vile	222222202	1944-06-21	1967 Jordan, Milwaukee...	M	53000.00	222222200	7

pname	pnumber	plocation	dnum	
1	ProductX	1	Bellaire	5
2	ProductY	2	Sugarland	5
3	ProductZ	3	Houston	5
4	Comput...	10	Stafford	4
5	Reorga...	20	Houston	1

Properties

Current connection parameters

Aggregate Status

Connection failu

Elapsed time 00:00:01.655

Finish time 9/17/2019 1:06:10

Name KAPILGAUTAMIN

Rows returned 129

Start time 9/17/2019 1:06:08

State Open

Connection

Connection nam KAPILGAUTAMIN (K

Connection Details

Name

The name of the connection.

Query executed successfully. KAPILGAUTAMIN (14.0 RTM) KAPILGAUTAMIN\Kapil Ga... Company 00:00:01 129 rows

2. Query screen shots along with the results :

a.) Insert your name into the Company database employee table with social security number of 111111111 and department 6. You don't need to use your real address.

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

```
INSERT INTO EMPLOYEE VALUES ('Kapil','M','Gautam','111111111','1993-03-18','800 Campbell, Richardson, TX','M','96000.00',NULL,'6');
SELECT * FROM EMPLOYEE;
```

The Results pane shows the output of the query, which includes the newly inserted record. The data is as follows:

id	fname	minit	lname	ssn	bdate	address	sex	salary	superssn	dno
1	Jared	D	James	1111111100	1966-10-10	123 Peachtree, Atlanta, GA	M	85000.00	NULL	6
2	Jon	C	Jones	1111111101	1967-11-14	111 Allgood, Atlanta, GA	M	45000.00	1111111100	6
3	Justin	n	Mark	1111111102	1966-01-12	2342 May, Atlanta, GA	M	40000.00	1111111100	6
4	Brad	C	Knight	1111111103	1968-02-13	176 Main St., Atlanta, GA	M	44000.00	1111111100	6
5	Kapil	M	Gautam	1111111111	1993-03-18	800 Campbell, Richardson, TX	M	96000.00	NULL	6
6	John	B	Smith	123456789	1955-01-09	731 Fondren, Houston, TX	M	30000.00	333445555	5
7	Evan	E	Wallis	2222222200	1958-01-16	134 Pelham, Milwaukee, WI	M	92000.00	NULL	7
8	Josh	U	Zell	2222222201	1954-05-22	266 McGrady, Milwaukee, WI	M	56000.00	2222222200	7
9	Andy	C	Vile	2222222202	1944-06-21	1967 Jordan, Milwaukee, WI	M	53000.00	2222222200	7
10	Tom	G	Brand	2222222203	1966-12-16	112 Third St, Milwaukee, WI	M	62500.00	2222222200	7
11	Jenny	F	Vos	2222222204	1967-11-11	263 Mayberry, Milwaukee, WI	F	61000.00	2222222201	7
12	Chris	A	Carter	2222222205	1960-03-21	565 Jordan, Milwaukee, WI	F	43000.00	2222222201	7
13	Kim	C	Grace	3333333300	1970-10-23	6677 Mills Ave, Sacramento, CA	F	79000.00	NULL	6
14	Jeff	H	Chase	3333333301	1970-01-07	145 Bradbury, Sacramento, CA	M	44000.00	3333333300	6
15	Franklin	T	Wong	333445555	1945-12-08	638 Voss, Houston, TX	M	40000.00	888665555	5
16	Alex	D	Freed	4444444400	1950-10-09	4333 Pillsbury, Milwaukee, WI	M	89000.00	NULL	7
17	Bonnie	S	Bays	4444444401	1956-06-19	111 Hollow, Milwaukee, WI	F	70000.00	4444444400	7

The Properties pane on the right shows the connection details for the current session, including the connection name 'KAPILGAUTAMIN (K)' and the state 'Open'.

b.) Update your employee record to show 111111100 as your supervisor. Query to show your record only.

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

```
UPDATE EMPLOYEE
SET superssn=111111100
WHERE ssn=111111111 AND dno=6;

SELECT * FROM EMPLOYEE WHERE ssn=111111111 AND dno=6;
```

The Results pane shows the output of the SELECT query, displaying one row for the employee Kapil Gautam:

	fname	minit	lname	ssn	bdate	address	sex	salary	superssn	dno
1	Kapil	M	Gautam	111111111	1993-03-18	800 Campbell, Richardson, TX	M	96000.00	111111100	6

The Properties pane on the right shows the connection details for the 'Company' connection, indicating a successful connection to the 'KAPILGAUTAMIN' database.

c.) Show all employees who work for supervisor Jared D. James and those who work for supervisor Evan E. Wallis. That is, everyone who works for either one of those two people. (You can write this so the query doesn't involve the name, if you wish.)

The screenshot displays the Microsoft SQL Server Management Studio interface. The main window shows a query in the SQLQuery3.sql file, which filters employees based on their supervisor's SSN. The query is as follows:

```
-- Jared D. James ssn is 111111100
-- Evan E. Wallis ssn is 222222200

SELECT * FROM EMPLOYEE
WHERE superssn=111111100 OR superssn=222222200;
```

The results pane shows 7 rows of data from the EMPLOYEE table. The columns are: fname, minit, lname, ssn, bdate, address, sex, salary, superssn, and dno. The data is as follows:

fname	minit	lname	ssn	bdate	address	sex	salary	superssn	dno
Jon	C	Jones	111111101	1967-11-14	111 Allgood, Atlanta, GA	M	45000.00	111111100	6
Justin	n	Mark	111111102	1966-01-12	2342 May, Atlanta, GA	M	40000.00	111111100	6
Brad	C	Knight	111111103	1968-02-13	176 Main St, Atlanta, GA	M	44000.00	111111100	6
Kapil	M	Gautam	111111111	1993-03-18	800 Campbell, Richardson, TX	M	96000.00	111111100	6
Josh	U	Zell	222222201	1954-05-22	266 McGrady, Milwaukee, WI	M	56000.00	222222200	7
Andy	C	Vile	222222202	1944-06-21	1967 Jordan, Milwaukee, WI	M	53000.00	222222200	7
Tom	G	Brand	222222203	1966-12-16	112 Third St, Milwaukee, WI	M	62500.00	222222200	7

The status bar at the bottom indicates that the query was executed successfully, returning 7 rows. The bottom of the screen shows the Windows taskbar with the time 1:37 PM.

d.) Show all employees who make more than \$50,000 per year, who are over 30 years old, and who live in Wisconsin (state abbreviation WI.)

The screenshot displays the Microsoft SQL Server Management Studio interface. The main window shows a query in the 'Query Editor' pane:

```
SELECT * FROM EMPLOYEE
WHERE salary > 50000 AND
address LIKE '%WI%' AND
((year(GETDATE()) - year(bdate)) > 30);
```

The 'Results' pane shows the output of the query, which is a table with 8 rows and 10 columns. The columns are: fname, minit, lname, ssn, bdate, address, sex, salary, superssn, and dno. The data is as follows:

fname	minit	lname	ssn	bdate	address	sex	salary	superssn	dno
Evan	E	Wallis	222222200	1958-01-16	134 Pelham, Milwaukee, WI	M	92000.00	NULL	7
Josh	U	Zell	222222201	1954-05-22	266 McGrady, Milwaukee, WI	M	56000.00	222222200	7
Andy	C	Vile	222222202	1944-06-21	1967 Jordan, Milwaukee, WI	M	53000.00	222222200	7
Tom	G	Brand	222222203	1966-12-16	112 Third St, Milwaukee, WI	M	62500.00	222222200	7
Jenny	F	Vos	222222204	1967-11-11	263 Mayberry, Milwaukee, WI	F	61000.00	222222201	7
Alex	D	Freed	444444400	1950-10-09	4333 Pillsbury, Milwaukee, WI	M	89000.00	NULL	7
Bonnie	S	Bays	444444401	1956-06-19	111 Hollow, Milwaukee, WI	F	70000.00	444444400	7
Alec	C	Best	444444402	1966-06-18	233 Solid, Milwaukee, WI	M	60000.00	444444400	7

The 'Properties' pane on the right shows the 'Aggregate Status' and 'Connection' details. The 'Aggregate Status' section indicates a 'Connection failure' with an elapsed time of 00:00:00.109. The 'Connection' section shows the connection name as 'KAPILGAUTAMIN (K)' and the connection details as 'The name of the connection.'