

## CSC623 Project 1

### Part 3 - Physical Model

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a. Develop SQL code to create the entire database schema, reflecting the constraints identified in previous steps.

Link:

<https://github.com/michelle-manfrini/SuperMaids-Cleaning-Company-Database/blob/main/Part%203%20-%20Translate%20Model%20for%20DBMS.py>

b. Create at least 5 tuples for each relation in your database.

#### 1. Employee Table

Employee Table						
	empNo	emp_firstname	emp_lastname	address	salary	telNo
0	682502	John	Smith	123 Main St	50000	3055551234
1	936034	Jane	Kirkland	456 Oak St	100000	3054219672
2	408452	Tomas	Diaz	822 Third St	70000	3053859264
3	274932	Emma	Rodriguez	734 Burrow Ave	80000	3059277283
4	172723	Joseph	Alcantara	481 Collins Ln	90000	3052013621
5	672459	Madeline	Connor	349 Douglas Ave	60000	4583492389

#### 2. Equipment Table

Equipment Table					
	equipNo	description		usage	cost
0	8273	Dusting Cloths	dusting	surfaces	10.99
1	182	Pressure Washer	exterior	cleaning	250.00
2	3729	Window Squeegee	window	cleaning	20.00
3	2947	Mop	floor	cleaning	30.50
4	9201	Vacuum	general	cleaning	150.00
5	6781	rugDoctor		rugs	45.00

### 3. Client Table

Client Table					
	clientNo	client_fname	client_lname	client_address	client_te_No
0	103649	Emily	Garcia	202 Elm St	7865557890
1	28452	David	Lee	101 Cedar Ln	3052946192
2	826491	Chloe	Smith	789 Pine Rd	7862949901
3	618352	Benjamin	Button	456 Oak Ave	3058366629
4	630984	Alice	Johnson	888 Maple Rd	3054443908
5	234892	John	Batman	349 Dixie Rd	4697894567

### 4. Service Table

Service Table							
	serviceID	clientNo	start_date	start_time	duration	comments	
0	274927	103649	2023-05-25	14:30:00	2.5	Special event	cleaning
1	472926	28452	2023-04-10	09:15:00	1.5	Apartment	cleaning
2	503900	826491	2023-03-20	13:45:00	2.0	Office	cleaning
3	127490	618352	2023-01-15	08:00:00	2.5	Regular	cleaning
4	394021	630984	2023-02-05	10:30:00	3.0	Deep	cleaning
5	459829	902786	2023-09-04	14:45:00	4.0	Kitchen	cleaning

### 5. EquipmentService Table

Equipment Service Table		
	equipNo	serviceID
0	8273	274927
1	182	472926
2	3729	503900
3	2947	127490
4	9201	394021
5	8273	472926
6	182	127490
7	2947	394021

6. EmployeeService Table

Employee Service Table		
	empNo	serviceID
0	682502	274927
1	936034	472926
2	408452	503900
3	274932	127490
4	172723	394021
5	936034	394021
6	682502	472926
7	172723	127490

c. Develop 5 SQL queries using embedded SQL

1. List employee IDs and the number of services that they are assigned to

Query 1		
	empNo	COUNT(serviceID)
0	172723	2
1	274932	1
2	408452	1
3	682502	2
4	936034	2

2. List client names that have a 305 area code phone number

Query 2			
	client_fname	client_lname	client_te_No
0	David	Lee	3052946192
1	Benjamin	Button	3058366629
2	Alice	Johnson	3054443908

3. List employee names that are assigned to more than one service

Query 3

	emp_firstname	emp_lastname	count(t2.serviceID)
0	Jane	Kirkland	2
1	John	Smith	2
2	Joseph	Alcantara	2

4. List the details of services assigned to a named employee

Query 4

	serviceID	clientNo	start_date	start_time	duration	comments	empNo
0	274927	103649	2023-05-25	14:30:00	2.5	Special event cleaning	682502
1	472926	28452	2023-04-10	09:15:00	1.5	Apartment cleaning	682502

5. List the details of equipment assigned to a service

Query 5

	serviceID	equipNo	description	usage	cost
0	274927	8273	Dusting Cloths	dusting surfaces	10.99
1	472926	182	Pressure Washer	exterior cleaning	250.00
2	503900	3729	Window Squeegee	window cleaning	20.00
3	127490	2947	Mop	floor cleaning	30.50
4	394021	9201	Vacuum	general cleaning	150.00
5	472926	8273	Dusting Cloths	dusting surfaces	10.99
6	127490	182	Pressure Washer	exterior cleaning	250.00
7	394021	2947	Mop	floor cleaning	30.50

- d. Upload all the code and documentation to GitHub

Link: <https://github.com/michelle-manfrini/SuperMaids-Cleaning-Company-Database>