



PROJECT: BEAUTY PARLOUR MANAGEMENT SYSTEM

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2018-19, SUMMER

Section: J

INTRODUCTION:

A database management system is a system software which is crucial for any organization. Our project was to create a database management system for a beauty parlour. In order to do this, we had gone through this phases:

- Scenario
- ER diagram
- Normalization
- Table Creation
- Data Insertion
- Query Writing

Scenario:

Our project was to create a database management system for a beauty parlour. In order to create a database management system for a beauty parlour we have visited 'Persona'.

In this beauty parlour, they have to store the address, email, and owner id of owner. Owner has a beauty parlour and beauty parlour have branches. They keep beauty parlour name, branch id, branch name and branch address in the database. Branches have to keep appointments with customer and an appointment has time, id, and date. Appointments are booked by customer and customer has name, address, phone number, gender, and id. An appointment has services and services have name, id, price, time. On the other hand, services are done by beauticians and beauticians have name, id, arrival time, salary, gender, phone number, skills.

A branch has a manager and manager has name, number, salary, email, hiredate, id and address. A branch has a beauty shop and they sell beauty products which has name, price id, stock, selling date. A beauty shop has shop keeper and shop keeper has name, id, hiredate, email, number, salary. That's all data persona store in their database management system.

Owner -----1-----have-----1-----Beauty parlour

UNF:

Have(O_ID, O_email, O_adress , BP_name, BP_license_no.)

1NF:

There is no multiple attribute.

1 .O_ID ,O_name, O_email, place_name, road.no. , BP_name, BP_license_no.

2NF:

1 .O_ID ,O_name, O_email, place_name, road.no.

2 .BP_name, BP_license_no.

3NF:

1.O_ID , O_name, O_email.

2.Place_name, road.no.

3.BP_name, BP_license_no.

TABLE CREATION:

1.O_ID , O_name, O_email, **A_code** ;

2.A_code ,Place_name, road.no.

3.BP_name, BP_license_no.

Beauty parlour -----1-----has-----*-----Branches

UNF:

Has (BP_name, BP_license_no., Branch_id, branch_name, place_name, road.no.)

1NF:

There is no multiple attribute.

1. BP_name, BP_license_no. , Branch_id, branch_name, place_name, road.no.

2NF:

1. BP_name, BP_license_no.
2. Branch_id, branch_name, place_name, road.no.

3NF:

1. BP_name, BP_license_no.
2. Branch_id, branch_name
3. place_name, road.no.

TABLE CREATION:

1. BP_name, BP_license_no.
2. Branch_id, branch_name ,A_code,BP_license_no.
3. A_code ,place_name, road.no.

Branches -----1-----have-----1-----Manager

UNF:

Have (Branch_id , Branch name, place_name, road.no. , M_hiredate, M_email, M_id, place_name, road.no. , M_name, M_salary, M_number)

1NF:

There is no multiple attribute .

1. Branch_id , Branch name, place_name, road.no. , M_hiredate, M_email, M_id, place_name, road.no. , M_name, M_salary, M_number .

2NF:

1. Branch_id , Branch name, place_name, road.no.
2. M_hiredate, M_email, M_id, place_name, road.no. , M_name, M_salary, M_number .

3NF:

1. Branch_id , Branch name
2. place_name, road.no.
3. M_hiredate, M_email, M_id , M_name, M_salary, M_number.

TABLE CREATION:

1. Branch_id , Branch name, **A_code**
2. A_code, place_name, road.no.
3. M_hiredate, M_email, M_id , M_name, M_salary, M_number , **A_code, Branch_id**

Branches -----1-----has-----*-----Employee

UNF:

Has (Branch_id , Branch_name, place_name, road.no. , E_id, E_name, E_arr_time , E_working_hour , E_number , E_gender , E_salary)

1NF:

There is no multiple attribute .

1. Branch_id ,Branch_name, place_name, road.no. , E_id, E_name, E_arr_time ,E_working_hour , E_number , E_gender , E_salary .

2NF:

1. Branch_id ,Branch_name, place_name, road.no.
2. E_id, E_name, E_arr_time ,E_working_hour , E_number , E_gender , E_salary .

3NF:

1. Branch_id ,Branch_name.
2. Place_name, road.no.
3. E_id, E_name, E_arr_time ,E_working_hour , E_number , E_gender , E_salary .

TABLE CREATION:

1. Branch_id ,Branch_name, **A_code**.
2. A_code ,Place_name, road.no.
3. E_id, E_name, E_arr_time ,E_working_hour , E_number , E_gender , E_salary, **Branch_id** .

Branches -----1-----have-----*-----Appointment

UNF:

Have (Branch_id , Branch name, place_name, road.no. , A_time , A_id, A_date)

1NF:

There is no multiple attribute .

1. Branch_id , Branch name, place_name, road.no., A_time , A_id, A_date

2NF:

1. Branch_id , Branch name, place_name, road.no.
2. A_time ,A_id, A_date.

3NF:

1. Branch_id , Branch name
2. place_name, road.no.
3. A_time ,A_id, A_date.

TABLE CREATION :

1. Branch_id , Branch name , **A_code**
2. A_code,place_name, road.no.
3. A_time ,A_id, A_date , **Branch_id** .

Appointment -----*-----Booked by-----*-----Customer

UNF:

Booked by (A_time ,A_id, A_date , C_id, C_name , C_gender, place_name, road.no. , C_phone, C_email)

1NF:

There is no multiple attribute.

1. A_time ,A_id, A_date , C_id, C_name , C_gender, place_name, road.no. , C_phone, C_email .

2NF:

1. A_time , A_id, A_date
2. C_id, C_name , C_gender, place_name, road.no. , C_phone, C_email .

3NF:

1. A_time , A_id, A_date
2. C_id, C_name , C_gender , C_phone, C_email .
3. A_code, place_name, road.no.

TABLE CREATION:

1. A_time , A_id, A_date
2. C_id, C_name , C_gender , C_phone, C_email, **A_code**.
3. A_code, place_name, road.no.
4. **A_id** , **C_id**

Appointment -----*-----By-----*-----Services

UNF:

By (A_time ,A_id, A_date , S_name, S_id, S_price , S_time)

1NF:

There is no multiple attribute.

1. A_time ,A_id, A_date , S_name, S_id, S_price , S_time.

2NF:

1. A_time , A_id, A_date
2. S_name, S_id, S_price , S_time

3NF:

1. A_time , A_id, A_date
2. S_name, S_id, S_price , S_time

TABLE _____ CREATION _____ :

1. A_time , A_id, A_date
2. S_name, S_id, S_price , S_time
3. A_id, S_id

Services -----*-----provide-----1-----Beauticians

UNF:

Provide (S_name, S_id, S_price , S_time , B_gender , B_id, B_name , B_phone, place_name, road.no., B_salary, skill, B_arr_time)

1NF:

Skill is the multiple attribute .

1. S_name, S_id, S_price , S_time , B_gender , B_id, B_name , B_phone, place_name, road.no., B_salary, skill, B_arr_time

2NF:

1. S_name, S_id, S_price , S_time
2. B_gender , B_id, B_name , B_phone, place_name, road.no., B_salary, skill, B_arr_time

3NF:

1. S_name, S_id, S_price , S_time
2. B_gender , B_id, B_name, , B_phone, ., B_salary, skill, B_arr_time
3. A_code, place_name, road.no

TABLE CREATION :

1. S_name, S_id, S_price, S_time, **B_id**, **skill**.
2. B_gender, B_id, B_name, , B_phone, ., B_salary, skill, B_arr_time, **A_code**
3. A_code, place_name, road.no.

Manager -----1-----under-----*-----Beauticians

UNF:

Under (M_hiredate, M_email, M_id, place_name, road.no. , M_name, M_salary, M_number, , B_gender, B_id, B_name, B_phone, place_name, road.no., B_salary, skill, B_arr_time)

1NF:

Skill is the multiple attribute.

1. M_hiredate, M_email, M_id, place_name, road.no. , M_name, M_salary, M_number, B_gender, B_id, B_name, B_phone, place_name, road.no., B_salary, skill, B_arr_time.

2NF:

1. M_hiredate, M_email, M_id, place_name, road.no. , M_name, M_salary, M_number.
2. B_gender, B_id, B_name, B_phone, place_name, road.no., B_salary, skill, B_arr_time.

3NF:

1. M_hiredate, M_email, M_id, M_name, M_salary, M_number.
2. place_name, road.no.
3. B_gender, B_id, B_name, B_phone, B_salary, skill, B_arr_time.

TABLE CREATION :

1. M_hiredate, M_email, M_id, M_name, M_salary, M_number, **A_code**.
2. A_code, place_name, road.no.
3. B_gender, B_id, B_name, B_phone, B_salary, skill, B_arr_time, **A_code**, **M_id**.

Branches -----1-----has-----1-----Beautishop

UNF:

Has(Branch_id , Branch_name, place_name, road.no., P_name, shop_id, P_id, P_stock, P_price, P_selling_date)

1NF:

There is no multiple attribute.

1. Branch_id , Branch_name, place_name, road.no., P_name, shop_id, P_id, P_stock, P_price, P_selling_date

2NF:

1. Branch_id , Branch_name, place_name, road.no.
2. P_name, shop_id, P_id, P_stock, P_price, P_selling_date

3NF:

1. Branch_id , Branch_name
2. place_name, road.no.
3. P_name, Shop_id, P_id, P_stock, P_price, P_selling_date

TABLE CREATION:

1. Branch_id ,Branch_name, **A_code**, **P_id**, **Shop_id**.
2. A_code ,place_name, road.no.
3. P_name, Shop_id, P_id, P_stock, P_price, P_selling_date

Beautishop -----1-----has-----1-----Shopkeeper

UNF:

Has (P_name, shop_id, P_id, P_stock, P_price, P_selling_date, S_id, S_name, S_hiredat, S_salary, S_number, S_email)

1NF:

There is no multiple attribute .

1. P_name, Shop_id, P_id, P_stock, P_price, P_selling_date, S_id, S_name, S_hiredat, S_salary, S_number, S_email, place_name, road.no.

2NF:

1. P_name, P_id, P_stock, P_price, P_selling_date
2. S_id, S_name, S_hiredat, S_salary, S_number, S_email, place_name, road.no.

3NF:

1. P_name, Shop_id, P_id, P_stock, P_price, P_selling_date
2. S_id, S_name, S_hiredate, S_salary, S_number, S_email
3. place_name, road.no.

TABLE CREATION :

1. P_name, shop_id, P_id, P_stock, P_price, P_selling_date
2. S_id, S_name, S_hiredate, S_salary, S_number, S_email, **A_code**, shop_id, P_id.
3. A_code, place_name, road.no.

TABLE COLLECTIONS:

1. O_ID, O_email, **A_code** .
2. A_code , Place_name, road.no.
3. BP_name, BP_license_no.
4. ~~BP_name, BP_license_no.~~
5. Branch_id, branch_name , **A_code** , **BP_license_no**.
6. ~~A_code , place_name, road.no.~~
7. ~~Branch_id , Branch name, **A_code**.~~
8. ~~A_code , place_name, road.no.~~
9. M_hiredate, M_email, M_id , M_name, M_salary, M_number, **A_code** , **Branch_id**.
10. ~~Branch_id , Branch name, **A_code**.~~

11. ~~A_code~~, Place_name, road.no.
12. E_id, E_name, E_arr_time, E_working_hour, E_number, E_gender, E_salary, **Branch_id**.
13. ~~Branch_id~~, Branch name, **A_code**
14. ~~A_code~~, place_name, road.no.
15. A_time, A_id, A_date, **Branch_id**.
16. ~~A_time~~, ~~A_id~~, A_date
17. C_id, C_name, C_gender, C_phone, C_email, **A_code**.
18. ~~A_code~~, place_name, road.no.
19. **A_id**, **C_id**
20. ~~A_time~~, ~~A_id~~, A_date
21. ~~S_name~~, ~~S_id~~, S_price, S_time
22. **A_id**, **S_id**
23. S_name, S_id, S_price, S_time, **B_id**, skill.
24. ~~B_gender~~, ~~B_id~~, B_name, B_phone, B_salary, ~~skill~~, **A_code**
25. ~~A_code~~, place_name, road.no.
26. ~~M_hiredate~~, M_email, ~~M_id~~, M_name, M_salary, M_number, **A_code**.
27. ~~A_code~~, place_name, road.no.
28. B_gender, B_id, B_name, B_phone, B_salary, ~~skill~~, A_code, **M_id**.
29. ~~Branch_id~~, Branch_name, **A_code**, **P_id**, **Shop_id**.

30. ~~A_code, place_name, road.no.~~

31. P_name, Shop_id, P_id, P_stock, P_price, P_selling_date

32. ~~P_name, shop_id, P_id, P_stock, P_price, P_selling_date~~

33. Sk_id, Sk_name, Sk_hiredate, Sk_salary, Sk_number, Sk_email, A_code, shop_id, P_id.

34. ~~A_code, place_name, road.no.~~

FINAL TABLE:----- #TABLE_NAME

1. O_id, O_name, A_code---#Owner

2. A_code, place name, road.no. ----# Address

3. BP_name, BP_licence no -----#Beautiparlour

4. Branch_id, branch_name, A_code, BP_licence-----#Branch

5. M_hire date, M_email, M_id, M-name, M_salary, M_number, A_code, Branch_id-----
#Manager

6. E_id, E_name, E_arr-time, E_working-hour, E_number, E_gender, E_salary -----#Employee

7. A_time, A_id, A_id, A_date, branch_id -----#Appointment

8. C_id, C_name, C_gender, C_phone, C_email, A_code-----#Customer

9. A_id, C_id -----#f1_k_many

10. A_id, S_id, -----#f2_k_many

11. S_name, S_id, S_price, S_time, B_id, Skill-----#Service

12. B_gender, B_id, B_name, B_phone, B_salary, Skill, A_code, Mid -----#Beautician

13. P_name, shop_id, P_id, P_stock, P_price, P_selling date, Branch_id-----#Shop

14. S_name, S_id, S_hiredate, S_salary, S_number, S_email, Acode, shop_id, P_id -----#Shop-Keeper

TABLE CREATION:-

```
1.create table Address (A_code number(10) primary key, Place_name varchar2(15), Road_no
number(10));
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Results	Explain	Describe	Saved SQL	History
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Object Type **TABLE** Object **ADDRESS**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
ADDRESS	A_CODE	Number	-	10	0	1	-	-	-
	PLACE_NAME	Varchar2	15	-	-	-	✓	-	-
	ROAD_NO	Number	-	10	0	-	✓	-	-

1 - 3

```
2.create table Owner (O_id number(10) primary key, O_email varchar2(30), A_code number(10));
```

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
OWNER	Q_ID	Number	-	10	0	1	-	-	-
	Q_EMAIL	Varchar2	30	-	-	-	✓	-	-
	A_CODE	Number	-	10	0	-	✓	-	-

1 - 3

3. create table Beautiparlour (BP_name varchar2(20), BP_licence number(10));

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
BEAUTIPARLOUR	BP_NAME	Varchar2	20	-	-	-	✓	-	-
	BP_LICENCE	Number	-	10	0	1	-	-	-

1 - 2

4.create table Branch (Branch_id number(10) primary key, Branch_name varchar2(30), A_code number(10), BP_licence number(10));

Results Explain Describe Saved SQL History

Object Type TABLE Object BRANCH

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
BRANCH	BRANCH_ID	Number	-	10	0	1	-	-	-
	BRANCH_NAME	Varchar2	30	-	-	-	✓	-	-
	A_CODE	Number	-	10	0	-	✓	-	-
	BP_LICIENCE	Number	-	10	0	-	✓	-	-

1 - 4

5.create table Manager (M_hiredate varchar2(10), M_email varchar2(30), M_id number(10) primary key,M_name varchar2(30), M_salary number(10), M_number number(15), A_code number(10), Branch_id number(10));

Results Explain Describe Saved SQL History

Object Type **TABLE** Object **MANAGER**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
MANAGER	M_HIREDATE	Date	7	-	-	-	✓	-	-
	M_EMAIL	Varchar2	30	-	-	-	✓	-	-
	M_ID	Number	-	10	0	1	-	-	-
	M_NAME	Varchar2	30	-	-	-	✓	-	-
	M_SALARY	Number	-	10	0	-	✓	-	-
	M_NUMBER	Number	-	15	0	-	✓	-	-
	A_CODE	Number	-	10	0	-	✓	-	-
	BRANCH_ID	Number	-	10	0	-	✓	-	-

1 - 8

6.create table Employee (E_id number(10) primary key, E_name varchar2(30),E_arr_time varchar2(10), E_working_hour number(10),E_number number(15), E_gender varchar2(10), E_salary number(10), Branch_id number(10));

Results Explain Describe Saved SQL History

Object Type TABLE Object EMPLOYEE

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
EMPLOYEE	E_ID	Number	-	10	0	1	-	-	-
	E_NAME	Varchar2	30	-	-	-	✓	-	-
	E_ARR_TIME	Varchar2	10	-	-	-	✓	-	-
	E_WORKING_HOUR	Number	-	10	0	-	✓	-	-
	E_NUMBER	Number	-	15	0	-	✓	-	-
	E_GENDER	Varchar2	10	-	-	-	✓	-	-
	E_SALARY	Number	-	10	0	-	✓	-	-
	BRANCH_ID	Number	-	10	0	-	✓	-	-
1 - 8									

7.create table Appointment (A_time varchar2(15), A_id number(10) primary key, A_date varchar2(10), Branch_id number(10));

Results Explain Describe Saved SQL History

Object Type TABLE Object APPOINTMENT

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
APPOINTMENT	A_TIME	Varchar2	15	-	-	-	✓	-	-
	A_ID	Number	-	10	0	1	-	-	-
	A_DATE	Date	7	-	-	-	✓	-	-
	BRANCH_ID	Number	-	10	0	-	✓	-	-
1 - 4									

8.create table Customer (C_id number(10) primary key, C_name varchar2(30), C_gender varchar2(10), C_phone number(15), C_email varchar2(30), A_code number(10));

Results Explain Describe Saved SQL History

Object Type TABLE Object CUSTOMER

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
CUSTOMER	C_ID	Number	-	10	0	1	-	-	-
	C_NAME	Varchar2	30	-	-	-	✓	-	-
	C_GENDER	Varchar2	10	-	-	-	✓	-	-
	C_PHONE	Number	-	15	0	-	✓	-	-
	C_EMAIL	Varchar2	30	-	-	-	✓	-	-
	A_CODE	Number	-	10	0	-	✓	-	-
1 - 6									

9.create table f1_k_many (A_id number(10), C_id number(10));

Results Explain Describe Saved SQL History

Object Type TABLE Object F1_K_MANY

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
F1_K_MANY	A_ID	Number	-	10	0	1	-	-	-
	C_ID	Number	-	10	0	2	-	-	-
1 - 2									

10.create table f2_k_many (A_id number(10), S_id number(10));

Results Explain Describe Saved SQL History

Object Type TABLE Object F2_K_MANY

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
F2_K_MANY	A_ID	Number	-	10	0	1	-	-	-
	S_ID	Number	-	10	0	2	-	-	-
1 - 2									

11. create table Service (S_name varchar2(30), S_id number(10) primary key, S_price number(10), S_time varchar2(10), B_id number(10), skill varchar2(30));

Results Explain Describe Saved SQL History

Object Type TABLE Object SERVICE

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
SERVICE	S_NAME	Varchar2	30	-	-	-	✓	-	-
	S_ID	Number	-	10	0	1	-	-	-
	S_PRICE	Number	-	10	0	-	✓	-	-
	S_TIME	Varchar2	10	-	-	-	✓	-	-
	B_ID	Number	-	10	0	-	✓	-	-
	SKILL	Varchar2	30	-	-	-	✓	-	-
1 - 6									

12.create table Beautician (B_id number(10), B_name varchar2(30), B_gender varchar2(10), B_phone number(15), B_salary number(10),skill varchar2(30), A_code number(10), M_id number(10));

Results Explain Describe Saved SQL History

Object Type **TABLE** Object **BEAUTICIAN**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
BEAUTICIAN	B_ID	Number	-	10	0	1	-	-	-
	B_NAME	Varchar2	30	-	-	-	✓	-	-
	B_GENDER	Varchar2	10	-	-	-	✓	-	-
	B_PHONE	Number	-	15	0	-	✓	-	-
	B_SALARY	Number	-	10	0	-	✓	-	-
	SKILL	Varchar2	30	-	-	2	-	-	-
	A_CODE	Number	-	10	0	-	✓	-	-
	M_ID	Number	-	10	0	-	✓	-	-

1 - 8

13. create table Shop (P_name varchar2(30), Shop_id number(10), P_id number(10), P_stock varchar2(10), P_price number(10), P_selling_date varchar2(15), Branch_id number(10));

Results Explain Describe Saved SQL History

Object Type **TABLE** Object **SHOP**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
SHOP	P_NAME	Varchar2	30	-	-	-	✓	-	-
	SHOP_ID	Number	-	10	0	1	-	-	-
	P_ID	Number	-	10	0	2	-	-	-
	P_STOCK	Varchar2	10	-	-	-	✓	-	-
	P_PRICE	Number	-	10	0	-	✓	-	-
	P_SELLING_DATE	Date	7	-	-	-	✓	-	-
	BRANCH_ID	Number	-	10	0	-	✓	-	-

1 - 7

14. create table Manager (SK_hiredate varchar2(10),SK_name varchar2(30), SK_email varchar2(30), SK_id number(10) primary key, SK_salary number(10), SK_number number(15), A_code number(10), Shop_id number(10), P_id number(10));

Object Type **TABLE** Object **SHOP_KEEPER**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
SHOP_KEEPER	SK_HIREDATE	Varchar2	10	-	-	-	✓	-	-
	SK_NAME	Varchar2	30	-	-	-	✓	-	-
	SK_EMAIL	Varchar2	30	-	-	-	✓	-	-
	SK_ID	Number	-	10	0	1	-	-	-
	SK_SALARY	Number	-	10	0	-	✓	-	-
	SK_NUMBER	Number	-	15	0	-	✓	-	-
	A_CODE	Number	-	10	0	-	✓	-	-
	SHOP_ID	Number	-	10	0	-	✓	-	-
	P_ID	Number	-	10	0	-	✓	-	-
									1 - 9

Foreign & Primary keys set-up:

alter table Owner add constraint ab foreign key (A_code) references Address (A_code);

alter table Branch add constraint ac foreign key (A_code) references Address (A_code);

alter table Manager add constraint ad foreign key (A_code) references Address (A_code);

alter table Customer add constraint ae foreign key (A_code) references Address (A_code);

alter table Beautician add constraint af foreign key (A_code) references Address (A_code);

alter table shop_keeper add constraint ag foreign key (A_code) references Address (A_code);

alter table Branch add constraint ah foreign key (BP_licence) references Beautiparlour (BP_licence);

alter table Manager add constraint ai foreign key (Branch_id) references Branch (Branch_id);

alter table Employee add constraint aj foreign key (Branch_id) references Branch (Branch_id);

alter table Appointment add constraint ak foreign key (Branch_id) references Branch (Branch_id);

alter table Shop add constraint al foreign key (Branch_id) references Branch (Branch_id);

alter table Beautician add constraint am primary key (B_id, skill);

alter table f1_k_many add constraint an primary key (A_id, C_id);

alter table f2_k_many add constraint ao primary key (A_id, S_id);

alter table Shop add constraint ap primary key (Shop_id, P_id);

alter table service add constraint aq foreign key (B_id, skill) references Beautician (B_id, skill);

alter table Shop_keeper add constraint ar foreign key (Shop_id, P_id) references Shop (Shop_id, p_id);

alter table Beautician add constraint au foreign key (M_id) references Manager (M_id);

alter table f1_k_many add constraint av foreign key (A_id) references Appointment (A_id);

alter table f1_k_many add constraint aw foreign key (C_id) references customer (C_id);

alter table f2_k_many add constraint ax foreign key (A_id) references Appointment (A_id);

alter table f2_k_many add constraint ay foreign key (S_id) references service (S_id);

TABLE INSERTION:

Results	Explain	Describe	Saved SQL	History
O_ID	O_EMAIL	A_CODE		
1121	tusher@gmail.com	101		
1 rows returned in 0.00 seconds			CSV Export	

1.Owner:-

INSERT INTO owner VALUES (1121,'tusher@gmail.com',101);

Results	Explain	Describe	Saved SQL	History
A_CODE	PLACE_NAME	ROAD_NO		
101	aftabnagar	3		
102	aftabnagar	4		
103	badda	6		
104	badda	8		
105	firmgate	10		
106	firmgate	1		
107	pallabi	2		
108	pallabi	3		
109	mirpur dohs	4		
110	mirpur dohs	9		
111	mirpur 12	10		
112	mirpur 12	13		
12 rows returned in 0.00 seconds			CSV Export	

2.Address:-

INSERT INTO address VALUES

(101,'aftabnagar',3);

INSERT INTO address VALUES

```
(102,'aftabnagar',4);  
INSERT INTO address VALUES  
  
(103,'badda',6);  
INSERT INTO address VALUES  
  
(104,'badda',8);  
INSERT INTO address VALUES  
  
(105,'firmgate',10);  
INSERT INTO address VALUES  
  
(106,'firmgate',1);  
INSERT INTO address VALUES  
  
(107,'pallabi',2);  
INSERT INTO address VALUES  
  
(108,'pallabi',3);  
INSERT INTO address VALUES  
  
(109,'mirpur dohs',4);  
INSERT INTO address VALUES  
  
(110,'mirpur dohs',9);  
INSERT INTO address VALUES  
  
(111,'mirpur 12',10);  
INSERT INTO address VALUES  
  
(112,'mirpur 12',13);
```

Results Explain Describe Saved SQL History

BP_NAME	BP_LICIENCE
persona	13335

1 rows returned in 0.00 seconds

[CSV Export](#)

3.Beutiparlour:-

INSERT INTO beautiparlour VALUES ('persona',13335);

Results Explain Describe Saved SQL History

BRANCH_ID	BRANCH_NAME	A_CODE	BP_LICIENCE
315	aftabnagar	101	13335
325	badda	103	13335
365	firmgate	105	13335
345	pallabi	107	13335
355	mirpur dohs	109	13335

5 rows returned in 0.00 seconds

CSV Export

4.Branch:-

INSERT INTO branch VALUES (315,'aftabnagar',101,13335);

INSERT INTO branch VALUES (325,'badda',103,13335);

INSERT INTO branch VALUES (365,'firmgate',105,13335);

INSERT INTO branch VALUES (345,'pallabi',107,13335);

INSERT INTO branch VALUES (355,'mirpur dohs',109,13335);

Results Explain Describe Saved SQL History

M_HIREDATE	M_EMAIL	M_ID	M_NAME	M_SALARY	M_NUMBER	A_CODE	BRANCH_ID
18-FEB-11	jones@gmail.com	181	jones	30000	1725343535	102	315
16-JUN-11	mike@gmail.com	171	mike	30000	1525343535	104	325
26-JAN-15	peter@gmail.com	161	peter	25000	1925343535	106	365
27-FEB-11	ross@gmail.com	191	ross	30000	1725343536	108	345
18-MAY-14	chandler@gmail.com	201	chandler	25000	1725343569	110	355

5 rows returned in 0.01 seconds

[CSV Export](#)

5.Manager:-

```
INSERT INTO manager VALUES (to_date('18-2-2011','dd-mm-yyyy'),'jones@gmail.com',181,'jones',30000,01725343535,102,315);
```

```
INSERT INTO manager VALUES (to_date('16-6-2011','dd-mm-yyyy'),'mike@gmail.com',171,'mike',30000,01525343535,104,325);
```

```
INSERT INTO manager VALUES (to_date('26-01-2015','dd-mm-yyyy'),'peter@gmail.com',161,'peter',25000,01925343535,106,365);
```

```
INSERT INTO manager VALUES (to_date('27-2-2011','dd-mm-yyyy'),'ross@gmail.com',191,'ross',30000,01725343536,108,345);
```

```
INSERT INTO manager VALUES (to_date('18-5-2014','dd-mm-yyyy'),'chandler@gmail.com',201,'chandler',25000,01725343569,110,355);
```

Results Explain Describe Saved SQL History							
E_ID	E_NAME	E_ARR_TIME	E_WORKING_HOUR	E_NUMBER	E_GENDER	E_SALARY	BRANCH_ID
1	accountant	10am	12	1925345637	male	12000	315
2	accountant	10am	12	1925345647	male	15000	325
3	accountant	11am	12	1925345667	male	16000	365
4	cleaner	2pm	3	1925345612	female	8000	345
5	cleaner	3pm	12	1925345637	female	8000	355

5 rows returned in 0.00 seconds

[CSV Export](#)

6.Employee:-

```
INSERT INTO employee values (01,'accountant','10am',12,01925345637,'male',12000,315);
```

```
INSERT INTO employee values (02,'accountant','10am',12,01925345647,'male',15000,325);
```

```
INSERT INTO employee values (03,'accountant','11am',12,01925345667,'male',16000,365);
```

```
INSERT INTO employee values (04,'cleaner','2pm',3,01925345612,'female',8000,345);
```

INSERT INTO employee values (05,'cleaner','3pm',12,01925345637,'female',8000,355);

Results	Explain	Describe	Saved SQL	History
A_TIME	A_ID	A_DATE	BRANCH_ID	
11.00am	3030	11-JUL-19	315	
1.00pm	3012	11-JUL-19	315	
3.00pm	3015	11-JUL-19	325	
6.00pm	3017	11-JUL-19	365	
11.00am	3020	11-JUL-19	355	

5 rows returned in 0.00 seconds [CSV Export](#)

7.Appointment:-

INSERT INTO appointment VALUES ('11.00am',3030,to_date('11-7-2019','dd-mm-yyyy'),315);

INSERT INTO appointment VALUES ('1.00pm',3012,to_date('11-7-2019','dd-mm-yyyy'),315);

INSERT INTO appointment VALUES ('3.00pm',3015,to_date('11-7-2019','dd-mm-yyyy'),325);

INSERT INTO appointment VALUES ('6.00pm',3017,to_date('11-7-2019','dd-mm-yyyy'),365);

INSERT INTO appointment VALUES ('11.00am',3020,to_date('11-7-2019','dd-mm-yyyy'),355);

Results Explain Describe Saved SQL History

C_ID	C_NAME	C_GENDER	C_PHONE	C_EMAIL	A_CODE
3	suruve	female	1935675345	suro2@gmail.com	102
4	fariha	female	1935675346	fariha@gamil.com	104
5	bristy	female	1935675347	bristy@gmail.com	110
6	mim	female	1935675348	mim@gmail.com	111
7	zarin	female	1	zarin@gamil.com	112

5 rows returned in 0.00 seconds

CSV Export

8.Customer:-

INSERT INTO Customer VALUES (03,'suruve','female',01935675345,'suro2@gmail.com',102);

INSERT INTO Customer VALUES (04,'fariha','female',01935675346,'fariha@gamil.com',104);

INSERT INTO Customer VALUES (05,'bristy','female',01935675347,'bristy@gmail.com',110);

INSERT INTO Customer VALUES (06,'mim','female',01935675348,'mim@gmail.com',111);

```
INSERT INTO Customer VALUES (07,'zarin','female',01,'zarin@gamil.com',112);
```

Results	Explain	Describe	Saved SQL	History
A_ID C_ID				
3012	4			
3015	5			
3017	6			
3020	7			
3030	3			
5 rows returned in 0.00 seconds		CSV Export		

9.f1 k many:-

```
INSERT INTO f1_k_many VALUES (3030,03);
```

```
INSERT INTO f1_k_many VALUES (3012,04);
```

```
INSERT INTO f1_k_many VALUES (3015,05);
```

```
INSERT INTO f1_k_many VALUES (3017,06);
```

```
INSERT INTO f1_k_many VALUES (3020,07);
```

Results	Explain	Describe	Saved SQL	History
A_ID S_ID				
3012	444			
3015	555			
3017	666			
3020	777			
3030	333			
5 rows returned in 0.00 seconds		CSV Export		

10.f2 k many:-

```
INSERT INTO f2_k_many VALUES (3030,333);
```

```
INSERT INTO f2_k_many VALUES (3012,444);
```

```
INSERT INTO f2_k_many VALUES (3015,555);
```

INSERT INTO f2_k_many VALUES (3017,666);

INSERT INTO f2_k_many VALUES (3020,777);

Results Explain Describe Saved SQL History

S_NAME	S_ID	S_PRICE	S_TIME	B_ID	SKILL
pedicure	333	4000	2hour	2	pedicure
manicure	444	3000	2hour	1	manicure
spa	555	7000	1hour	3	spa
party makeup	777	10000	3hour	7	party makeup
haircut	666	2000	.45 min	5	haircut

5 rows returned in 0.00 seconds

[CSV Export](#)

11.Service:-

INSERT INTO service VALUES ('pedicure',333,4000,'2hour',2,'pedicure');

INSERT INTO service VALUES ('manicure',444,3000,'2hour',1,'manicure');

INSERT INTO service VALUES ('spa',555,7000,'1hour',3,'spa');

INSERT INTO service VALUES ('party makeup',777,10000,'3hour',7,'party makeup');

INSERT INTO service VALUES ('haircut',666,2000,'45 min',5,'haircut');

Results Explain Describe Saved SQL History

B_ID	B_NAME	B_GENDER	B_PHONE	B_SALARY	SKILL	A_CODE	M_ID
2	kabbo	female	1821426001	30000	pedicure	102	181
1	rodela	female	1821426061	30000	manicure	104	171
3	ibnath	female	1821426051	30000	spa	106	161
5	mohona	female	1821426071	30000	haircut	108	191
7	nisha	female	1821426011	30000	party makeup	110	201

5 rows returned in 0.00 seconds

CSV Export

12.Beautician:-

INSERT INTO beautician VALUES (02,'kabbo','female',01821426001,30000,'pedicure',102,181);

INSERT INTO beautician VALUES (01,'rodela','female',01821426061,30000,'manicure',104,171);

INSERT INTO beautician VALUES (03,'ibnath','female',01821426051,30000,'spa',106,161);

```
INSERT INTO beautician VALUES (05,'mohona','female',01821426071,30000,'haircut',108,191);
```

```
INSERT INTO beautician VALUES (07,'nisha','female',01821426011,30000,'party makeup',110,201);
```

Results

Explain

Describe

Saved SQL

History

P_NAME	SHOP_ID	P_ID	P_STOCK	P_PRICE	P_SELLING_DATE	BRANCH_ID
shampoo	3131	3311	20 box	250	17-APR-19	315
hairspray	3132	4111	30 box	350	15-APR-19	325
haircomb	3133	5111	40 box	350	13-JUL-19	365
makeup box	3134	6111	10 box	2000	12-JAN-19	345
face powder	3135	7111	10 box	550	17-APR-19	355

5 rows returned in 0.00 seconds

[CSV Export](#)

13. Shop:-

```
INSERT INTO shop VALUES ('shampoo',3131,3311,'250box', 250,' to_date('17-04-2019','dd-mm-yyyy'),'315);
```

```
INSERT INTO shop VALUES ('hairspray',3132,4111,'250box', 250,' to_date('17-04-2019','dd-mm-yyyy'),'325);
```

```
INSERT INTO shop VALUES ('haircomb',3133,5111,'250box', 350,' to_date('17-04-2019','dd-mm-yyyy'),'365);
```

```
INSERT INTO shop VALUES ('makeup box',3134,6111,'250box', 2000,' to_date('17-04-2019','dd-mm-yyyy'),'345);
```

```
INSERT INTO shop VALUES ('face powder',3135,7111,'250box', 550,' to_date('17-04-2019','dd-mm-yyyy'),'355);
```


Results

Explain

Describe

Saved SQL

History

SK_HIREDATE	SK_NAME	SK_EMAIL	SK_ID	SK_SALARY	SK_NUMBER	A_CODE	SHOP_ID	P_ID
17-DEC-17	gunther	gunther@gmail.com	995	6000	1738554488	102	3131	3311
17-DEC-16	david	david@gmail.com	993	7000	1738554498	104	3132	4111
17-DEC-15	martin	martin@gmail.com	998	6000	1738554487	105	3133	5111
17-DEC-14	garix	garix@gmail.com	992	6000	1738554481	107	3134	6111
17-DEC-13	monti	monti@gmail.com	991	8000	1738554482	109	3135	7111

5 rows returned in 0.00 seconds

[CSV Export](#)

14. Shop_keeper:-

```
INSERT INTO shop_keeper VALUES (to_date('17-12-2017','dd-mm-yyyy'),'gunther','gunther@gmail.com',995,6000,01738554488,102,3131,3311);
```

```
INSERT INTO shop_keeper VALUES (to_date('17-12-2016','dd-mm-yyyy'),'david','david@gmail.com',993,7000,01738554498,104,3132,4111);
```

```
INSERT INTO shop_keeper VALUES (to_date('17-12-2015','dd-mm-yyyy'),'martin','martin@gmail.com',998,6000,01738554487,105,3133,5111);
```

```
INSERT INTO shop_keeper VALUES (to_date('17-12-2014','dd-mm-yyyy'),'garix','garix@gmail.com',992,6000,01738554481,107,3134,6111);
```

```
INSERT INTO shop_keeper VALUES (to_date('17-12-2013','dd-mm-yyyy'),'monti','monti@gmail.com',991,8000,01738554482,109,3135,7111);
```

QUERY WRITING:

Single row function :

1. Find the details of the customer whose name is Suruve.

Ans: `SELECT * FROM CUSTOMER WHERE LOWER (C_NAME)='suruve';`

User: SYSTEM

Home > SQL > **SQL Commands**

☒ Autocommit Display 10 **Save** **Run**

```
select * from customer where LOWER(C_name)='suruve';
```

Results Explain Describe Saved SQL History

C_ID	C_NAME	C_GENDER	C_PHONE	C_EMAIL	A_CODE
3	suruve	female	1935675345	suro2@gmail.com	102

1 rows returned in 0.00 seconds [CSV Export](#)

2. Display the place names in upper case .

Ans: select UPPER(PLACE_NAME) FROM ADDRESS;

User: SYSTEM

Home > SQL > **SQL Commands**

☒ Autocommit Display 20 Save Run

```
select UPPER (PLACE_NAME) from address;
```

Results Explain Describe Saved SQL History

UPPER(PLACE_NAME)
AFTABNAGAR
AFTABNAGAR
BADDA
BADDA
FIRMGATE
FIRMGATE
PALLABI
PALLABI
MIRPUR DOHS
MIRPUR DOHS
MIRPUR 12
MIRPUR 12

12 rows returned in 0.00 seconds [CSV Export](#)

GROUP FUNCTION:

1. Find the average salary of the beauticians .

Ans: SELECT AVG (B_SALARY) AS AVERAGE_BEAUTICIAN_SALARY FROM BEAUTICIAN;

User: SYSTEM

Home > SQL > **SQL Commands**

☒ Autocommit Display 20 **Save** **Run**

```
SELECT AVG (B_SALARY) AS AVERAGE_BEAUTICIAN_SALARY FROM BEAUTICIAN;
```

Results Explain Describe Saved SQL History

AVERAGE_BEAUTICIAN_SALARY
30000

1 rows returned in 0.00 seconds [CSV Export](#)

2.Fnd maximum salary of a shop keeper.

Ans: SELECT MAX(SK_SALARY) AS MAX_SALARY FROM SHOP_KEEPER;

User: SYSTEM

Home > SQL > SQL Commands

☒ Autocommit Display 20 ▼

Save

Run

```
SELECT MAX (SK_SALARY) AS MAX_SALARY FROM SHOP_KEEPER;
```

Results Explain Describe Saved SQL History

MAX_SALARY
8000

1 rows returned in 0.02 seconds

[CSV Export](#)

SUB QUERY:

1.Find the name of managers who get more salary then m_id=161.

Ans: SELECT M_NAME FROM MANAGER WHERE M_SALARY > (SELECT M_SALARY FROM MANAGER WHERE M_ID=161);

User: SYSTEM

Home > SQL > **SQL Commands**

☒ Autocommit Display 20 **Save** **Run**

```
SELECT M_NAME FROM MANAGER WHERE M_SALARY > (SELECT M_SALARY FROM MANAGER WHERE M_ID=161);
```

Results Explain Describe Saved SQL History

M_NAME
jones
mike
ross

3 rows returned in 0.00 seconds [CSV Export](#)

2.Find the name of services which prices is more then s_id=666.

Ans. SELECT S_NAME FROM SERVICE WHERE S_PRICE > (SELECT S_PRICE FROM SERVICE WHERE S_ID=666);

User: SYSTEM

Home > SQL > **SQL Commands**

☒ Autocommit Display 20 **Save** **Run**

```
SELECT S_NAME FROM SERVICE WHERE S_PRICE > (SELECT S_PRICE FROM SERVICE WHERE S_ID=666);
```

Results Explain Describe Saved SQL History

S_NAME
pedicure
manicure
spa
party makeup

4 rows returned in 0.00 seconds [CSV Export](#)

JOINING :

1.Display the name of branches and its manager name.

Ans: SELECT MANAGER.M_NAME, BRANCH.BRANCH_NAME FROM MANAGER, BRANCH WHERE
MANAGER.BRANCH_ID= BRANCH.BRANCH_ID;

User: SYSTEM

Home > SQL > **SQL Commands**

☒ Autocommit Display 20 Save Run

```
select MANAGER.M_NAME, BRANCH.BRANCH_NAME FROM MANAGER, BRANCH WHERE  
MANAGER.BRANCH_ID=BRANCH.BRANCH_ID;
```

Results Explain Describe Saved SQL History

M_NAME	BRANCH_NAME
jones	aftabnagar
mike	badda
peter	firmgate
ross	pallabi
chandler	mirpur dohs

5 rows returned in 0.00 seconds [CSV Export](#)

2.Display the manager name and his beautician name.

Ans: SELECT MANAGER.M_NAME, BEAUTICIAN.B_NAME FROM MANAGER, BEAUTICIAN WHERE
MANAGER.M_ID= BEAUTICIAN.M_ID;

☒ Autocommit Display 20 ▼

Save

Run

```
SELECT MANAGER.M_NAME, BEAUTICIAN.B_NAME FROM MANAGER, BEAUTICIAN WHERE  
MANAGER.M_ID= BEAUTICIAN.M_ID;
```

Results Explain Describe Saved SQL History

M_NAME	B_NAME
jones	kabbo
mike	rodela
peter	ibnath
ross	mohona
chandler	nisha

CONCLUSION:

All of our group member worked hard to complete this project. As we had gone through the entire DBMS now we are really confident to create an accurate and giant DBMS for any kind of institute.