



Star Cineplex Movie Theater Management System

Course Name: Introduction To Database

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Section: C

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❖ Introduction

Star Cineplex is one of the biggest movie theater in Bangladesh. It is fully controlled by Computer based software to maintain day to day estimation. By this software we can store the category of tickets so that customers can purchase their desired tickets. It also records the limitation, time-limit, purchase and sell report of tickets. This system is totally hassle free and shorten the human effort. It is totally computerized so the probability of error is less and it is so user friendly. We created our project by using the concepts of DBMS.

❖ Case Study

In Star Cineplex movie theater management system has many halls to show the movies. There is a manager to maintain the hall. Each manager has manager id, name, address, city country and multiple phone numbers. Each hall has hall name, id, and hall seats. A manager can manage multiple halls but a hall can be managed by exactly one manager. Different movies are showed in different halls. Each movie has movie id, name, time and type. A movie can be showed in many halls. Manager is also handling the staffs of movie theater. Each staff has staff id, name, age, address and multiple phone numbers. A staff is handled by exactly one manager but a manager can handle multiple staffs. There is a multiple ticket counters to sell the tickets. Each ticket counter has different id, number and type. Each ticket counter maintained by many staffs. Each ticket counter has ticket sellers to sell the tickets. Each ticket seller has seller id, name, address, age and multiple phone numbers. Each ticket counter has exactly one ticket seller. Ticket seller sells the tickets. Each ticket has ticket id, price, date and type. A customer can purchase multiple tickets. Customers can also reserve the tickets through online booking. Each customer has customer id, name, address, city, country and multiple phone numbers.

❖ Normalization

Staff->|-----handle-----||-Manager

Handle (s_id, s_name, s_phone, s_address, s_age, m_id, m_name, m_phone, m_address, city, country)

1NF:

- s_phone, m_phone are multivalued attributes.

2NF:

1. s_id, s_name, s_address, s_phone, s_age, m_id
2. m_id, m_name, m_address, m_phone, city, country

3NF:

1. s_id, s_name, s_address, s_phone, s_age, m_id
2. m_id, m_name, m_address, m_phone, a_id
3. a_id, city, country

Table:

1. s_id, s_name, s_address, s_phone, s_age, m_id
2. m_id, m_name, m_address, m_phone
3. a_id, city, country

Staff->|-----work-----||-Hall

Work (s_id, s_name, s_phone, s_address, s_age, hall_id, hall_name, hall_seats)

1NF:

- s_phone is multivalued attribute.

2NF:

1. s_id, s_name, s_phone, s_address, s_age, hall_id
2. hall_id, hall_name, hall_seats

3NF:

1. s_id, s_name, s_phone, s_address, s_age, hall_id
2. hall_id, hall_name, hall_seats

No transitive attributes.

Table:

1. s_id, s_name, s_phone, s_address, s_age, hall_id
2. hall_id, hall_name, hall_seats

Staff->|-----job-----|<-Ticket counter

Job (s_id, s_name, s_phone, s_address, s_age, tc_id, tc_type, tc_no)

1NF:

- s_phone is multivalued attribute.

2NF:

1. s_id, s_name, s_phone, s_address, s_age
2. tc_id, tc_type, tc_no
3. stc_id, s_id, tc_id

3NF:

1. s_id, s_name, s_phone, s_address, s_age
2. tc_id, tc_type, tc_no
3. stc_id, s_id, tc_id

No transitive attributes

Table:

1. s_id, s_name, s_phone, s_address, s_age
2. tc_id, tc_type, tc_no
3. stc_id, s_id, tc_id

Manager-||-----manage-----|<-Hall

Manage (m_id, m_name, m_address, m_phone, hall_id, hall_name, hall_seats)

1NF:

- m_phone multivalued attribute.

2NF:

1. m_id, m_name, m_address, m_phone, city, country
2. hall_id, hall_name, hall_seats, m_id

3NF:

1. m_id, m_name, m_address, m_phone, a_id
2. hall_id, hall_name, hall_seats, m_id
3. a_id, city, country

Table:

4. m_id, m_name, m_address, m_phone, a_id
5. hall_id, hall_name, hall_seats, m_id
6. a_id, city, country

Hall->|-----show-----|<-Movies

Show (hall_id, hall_name, hall_seats, movie_id, movie_name, movie_type, movie_time)

1NF:

- No multivalued attributes.

2NF:

1. hall_id, hall_name, hall_seats
2. movie_id, movie_name, movie_type, movie_time
3. hm_id, hall_id, movie_id

3NF:

1. hall_id, hall_name, hall_seats
2. movie_id, movie_name, movie_type, movie_time
3. hm_id, hall_id, movie_id

No transitive attributes.

Table:

1. hall_id, hall_name, hall_seats
2. movie_id, movie_name, movie_type, movie_time
3. hm_id, hall_id, movie_id

Ticket counter-||-----has-----|<-Ticket seller

Has (tc_id, tc_type, tc_no, ts_id, ts_name, ts_phone, ts_address, ts_age)

1NF:

- ts_phone multivalued attribute.

2NF:

1. tc_id, tc_type, tc_no
2. ts_id, ts_name, ts_phone, ts_address, ts_age, tc_id

3NF:

1. tc_id, tc_type, tc_no
2. ts_id, ts_name, ts_phone, ts_address, ts_age, tc_id

No transitive attributes.

Table:

1. tc_id, tc_type, tc_no
2. ts_id, ts_name, ts_phone, ts_address, ts_age, tc_id

Ticket seller-||-----sells-----|<-Ticket

Sells (ts_id, ts_name, ts_phone, ts_address, ts_age, t_id, t_type, t_price, t_date)

1NF:

- ts_phone multivalued attribute.

2NF:

1. ts_id, ts_name, ts_phone, ts_address, ts_age
2. t_id, t_type, t_price, t_date, ts_id

3NF:

1. ts_id, ts_name, ts_phone, ts_address, ts_age
2. t_id, t_type, t_price, t_date, ts_id

No transitive attributes.

Table:

1. ts_id, ts_name, ts_phone, ts_address, ts_age
2. t_id, t_type, t_price, t_date, ts_id

Ticket->|-----purchase-----|<- Customers

Purchase (t_id, t_type, t_price, t_date, c_id, c_name, c_address, c_phone, city, country)

1NF:

- c_phone multivalued attribute.

2NF:

1. t_id, t_type, t_price, t_date
2. c_id, c_name, c_address, c_phone, city, country
3. ticu_id, t_id, c_id

3NF:

1. t_id, t_type, t_price, t_date
2. c_id, c_name, c_address, c_phone, a_id
3. ticu_id, t_id, c_id
4. a_id, city, country

Table:

1. t_id, t_type, t_price, t_date
2. c_id, c_name, c_address, c_phone, a_id
3. ticu_id, t_id, c_id
4. a_id, city, country

Ticket->|-----reserved-----|<-Customers

Reserved (t_id, t_type, t_price, t_date, c_id, c_name, c_address, c_phone, city, country)

1NF:

- c_phone multivalued attribute.

2NF:

4. t_id, t_type, t_price, t_date
5. c_id, c_name, c_address, c_phone, city, country
6. tico_id, t_id, c_id

3NF:

5. t_id, t_type, t_price, t_date
6. c_id, c_name, c_address, c_phone, a_id
7. ticu_id, t_id, c_id
8. a_id, city, country

Table:

1. t_id, t_type, t_price, t_date
2. c_id, c_name, c_address, c_phone, a_id
3. ticu_id, t_id, c_id
4. a_id, city, country

Total Table:

1. s_id, s_name, s_address, s_phone, s_age, m_id
2. ~~m_id, m_name, m_address, m_phone~~
3. a_id, city, country
4. s_id, s_name, s_phone, s_address, s_age, hall_id
5. ~~hall_id, hall_name, hall_seats~~
6. ~~s_id, s_name, s_phone, s_address, s_age~~
7. tc_id, tc_type, tc_no
8. stc_id, s_id, tc_id
9. m_id, m_name, m_address, m_phone, a_id

10. hall_id, hall_name, hall_seats, m_id
11. a_id, city, country
12. hall_id, hall_name, hall_seats
13. movie_id, movie_name, movie_type, movie_time
14. hm_id, hall_id, movie_id
15. tc_id, tc_type, tc_no
16. ts_id, ts_name, ts_phone, ts_address, ts_age, tc_id
17. ts_id, ts_name, ts_phone, ts_address, ts_age
18. t_id, t_type, t_price, t_date, ts_id
19. t_id, t_type, t_price, t_date
20. c_id, c_name, c_address, c_phone, a_id
21. ticu_id, t_id, c_id
22. a_id, city, country
23. t_id, t_type, t_price, t_date
24. c_id, c_name, c_address, c_phone, a_id
25. ticu_id, t_id, c_id
26. a_id, city, country

Final Table:

1. s_id, s_name, s_address, s_phone, s_age, m_id
2. a_id, city, country
3. s_id, s_name, s_phone, s_address, s_age, hall_id
4. tc_id, tc_type, tc_no
5. stc_id, s_id, tc_id
6. m_id, m_name, m_address, m_phone, a_id
7. hall_id, hall_name, hall_seats, m_id
8. movie_id, movie_name, movie_type, movie_time
9. hm_id, hall_id, movie_id
10. ts_id, ts_name, ts_phone, ts_address, ts_age, tc_id
11. t_id, t_type, t_price, t_date, ts_id
12. c_id, c_name, c_address, c_phone, a_id
13. ticu_id, t_id, c_id

❖ Table Creation

1. create table staff
(
 s_id varchar2(5),
 s_name varchar2(20),
 s_address varchar2(20),
 s_phone number(12),
 s_age number (3),
 m_id varchar2(5)
)

desc staff

Results

Explain

Describe

Saved SQL

History

Object Type

TABLE

Object

STAFF

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
STAFF	S_ID	Varchar2	5	-	-	-	✓	-	-
	S_NAME	Varchar2	20	-	-	-	✓	-	-
	S_ADDRESS	Varchar2	20	-	-	-	✓	-	-
	S_PHONE	Number	-	12	0	-	✓	-	-
	S_AGE	Number	-	3	0	-	✓	-	-
	M_ID	Varchar2	5	-	-	-	✓	-	-

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- ```
2. create table address
(
 a_id varchar2(5),
 city varchar2(20),
 country varchar2(20)
)
```

desc address

| Results                                        | Explain        | Describe  | Saved SQL | History   |       |             |          |         |         |
|------------------------------------------------|----------------|-----------|-----------|-----------|-------|-------------|----------|---------|---------|
| Object Type <b>TABLE</b> Object <b>ADDRESS</b> |                |           |           |           |       |             |          |         |         |
| Table                                          | Column         | Data Type | Length    | Precision | Scale | Primary Key | Nullable | Default | Comment |
| <u>ADDRESS</u>                                 | <u>A_ID</u>    | Varchar2  | 5         | -         | -     | -           | ✓        | -       | -       |
|                                                | <u>CITY</u>    | Varchar2  | 20        | -         | -     | -           | ✓        | -       | -       |
|                                                | <u>COUNTRY</u> | Varchar2  | 20        | -         | -     | -           | ✓        | -       | -       |
| 1 - 3                                          |                |           |           |           |       |             |          |         |         |

desc staff2

[illegible]

desc ticket\_counter

|                         |                         |                          |                           |                         |
|-------------------------|-------------------------|--------------------------|---------------------------|-------------------------|
| <a href="#">Results</a> | <a href="#">Explain</a> | <a href="#">Describe</a> | <a href="#">Saved SQL</a> | <a href="#">History</a> |
|-------------------------|-------------------------|--------------------------|---------------------------|-------------------------|

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Object Type **TABLE** Object **TICKET\_COUNTER**

| Table                 | Column         | Data Type | Length | Precision | Scale | Primary Key | Nullable | Default | Comment |
|-----------------------|----------------|-----------|--------|-----------|-------|-------------|----------|---------|---------|
| <u>TICKET_COUNTER</u> | <u>TC_ID</u>   | Varchar2  | 10     | -         | -     | -           | ✓        | -       | -       |
|                       | <u>TC_TYPE</u> | Varchar2  | 20     | -         | -     | -           | ✓        | -       | -       |
|                       | <u>TC_NO</u>   | Number    | -      | 12        | 0     | -           | ✓        | -       | -       |

1 - 3

5. create table ticket\_counter2

```
(
 stc_id varchar2(10),
 s_id varchar2(10),
 tc_id varchar2(10)
)
```

desc ticket\_counter2

Results Explain Describe Saved SQL History

Object Type **TABLE** Object **TICKET\_COUNTER2**

| Table           | Column | Data Type | Length | Precision | Scale | Primary Key | Nullable | Default | Comment |
|-----------------|--------|-----------|--------|-----------|-------|-------------|----------|---------|---------|
| TICKET_COUNTER2 | STC_ID | Varchar2  | 10     | -         | -     | -           | ✓        | -       | -       |
|                 | S_ID   | Varchar2  | 10     | -         | -     | -           | ✓        | -       | -       |
|                 | TC_ID  | Varchar2  | 10     | -         | -     | -           | ✓        | -       | -       |

1 - 3

6. create table manager

```
(
 m_id number(12),
 m_name varchar2(20),
 m_address varchar2(10),
 m_phone number(10),
 a_id number(10)
)
desc manager
```

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_ID      | Number    | -      | 12        | 0     | -           | ✓        | -       | -       |
|         | M_NAME    | Varchar2  | 20     | -         | -     | -           | ✓        | -       | -       |
|         | M_ADDRESS | Varchar2  | 10     | -         | -     | -           | ✓        | -       | -       |
|         | M_PHONE   | Number    | -      | 10        | 0     | -           | ✓        | -       | -       |
|         | A_ID      | Number    | -      | 10        | 0     | -           | ✓        | -       | -       |

1 - 5

7. create table Hall

```
(
 hall_id number(12),
 hall_name varchar2(20),
 hall_seats varchar2(10),
 m_id number(10)
)
desc Hall
```





| <a href="#">Results</a> <a href="#">Explain</a> <a href="#">Describe</a> <a href="#">Saved SQL</a> <a href="#">History</a> |                |           |        |           |       |             |          |         |         |
|----------------------------------------------------------------------------------------------------------------------------|----------------|-----------|--------|-----------|-------|-------------|----------|---------|---------|
| Object Type <b>TABLE</b> Object <b>CUSTOMER_TICKET</b>                                                                     |                |           |        |           |       |             |          |         |         |
| Table                                                                                                                      | Column         | Data Type | Length | Precision | Scale | Primary Key | Nullable | Default | Comment |
| <u>CUSTOMER_TICKET</u>                                                                                                     | <u>TICU_ID</u> | Number    | -      | 12        | 0     | -           | ✓        | -       | -       |
|                                                                                                                            | <u>T_ID</u>    | Number    | -      | 10        | 0     | -           | ✓        | -       | -       |
|                                                                                                                            | <u>C_ID</u>    | Number    | -      | 10        | 0     | -           | ✓        | -       | -       |

1 - 3

## ❖ Data Insertion

### 1. insert into staff

(s\_id, s\_name, s\_address, s\_phone, s\_age, m\_id) values (101, 'Fahad', 'Dhaka', 017364, 18, 201)

insert into staff

(s\_id, s\_name, s\_address, s\_phone, s\_age, m\_id) values (102, 'Fahim', 'Dhaka', 019664, 18, 202)

insert into staff

(s\_id, s\_name, s\_address, s\_phone, s\_age, m\_id) values (103, 'Farabi', 'Rajshahi', 017223, 20, 203)

insert into staff

(s\_id, s\_name, s\_address, s\_phone, s\_age, m\_id) values (104, 'Rasel', 'Sylet', 018334, 22, 204)

insert into staff

(s\_id, s\_name, s\_address, s\_phone, s\_age, m\_id) values (105, 'Sumon', 'Chittagong', 018760, 20, 205)

select \* from staff

| Results | Explain | Describe   | Saved SQL | History |      |
|---------|---------|------------|-----------|---------|------|
| S_ID    | S_NAME  | S_ADDRESS  | S_PHONE   | S_AGE   | M_ID |
| 101     | Fahad   | Dhaka      | 17364     | 18      | 201  |
| 102     | Fahim   | Dhaka      | 19664     | 18      | 202  |
| 103     | Farabi  | Rajshahi   | 17223     | 20      | 203  |
| 104     | Rasel   | Sylet      | 18334     | 22      | 204  |
| 105     | Sumon   | Chittagong | 18760     | 20      | 205  |

### 2. insert into address

(a\_id, city, country) values (1001, 'Dhaka', 'Bangladesh')

insert into address

(a\_id, city, country) values (1002, 'Khulna', 'Bangladesh')

insert into address

(a\_id, city, country) values (1003, 'Delhi', 'India')

insert into address

(a\_id, city, country) values (1004, 'Kolkata', 'India')

insert into address

(a\_id, city, country) values (1005, 'Dhaka', 'Bangladesh')

select \* from address

Results

Explain

Describe

Saved SQL

History

| A_ID | CITY    | COUNTRY    |
|------|---------|------------|
| 1001 | Dhaka   | Bangladesh |
| 1002 | Khulna  | Bangladesh |
| 1003 | Delhi   | India      |
| 1004 | Kolkata | India      |
| 1005 | Dhaka   | Bangladesh |



### 3. insert into staff2

(s\_id, s\_name, s\_phone, s\_address, s\_age, hall\_id) values (101, 'Fahad', 017364, 'Dhaka', 18, 2110)

insert into staff2

(s\_id, s\_name, s\_phone, s\_address, s\_age, hall\_id) values (102, 'Fahim', 019664, 'Dhaka', 18, 2110)

insert into staff2

(s\_id, s\_name, s\_phone, s\_address, s\_age, hall\_id) values (103, 'Farabi', 017223, 'Rajshahi', 20, 2111)

insert into staff2

(s\_id, s\_name, s\_phone, s\_address, s\_age, hall\_id) values (104, 'Rasel', 018334, 'Sylet', 22, 2112)

insert into staff2

(s\_id, s\_name, s\_phone, s\_address, s\_age, hall\_id) values (105, 'Sumon', 018760, 'Chittagong', 20, 2110)

select \* from staff2

| Results | Explain | Describe | Saved SQL  | History |         |
|---------|---------|----------|------------|---------|---------|
| S_ID    | S_NAME  | S_PHONE  | S_ADDRESS  | S_AGE   | HALL_ID |
| 101     | Fahad   | 17364    | Dhaka      | 18      | 2110    |
| 102     | Fahim   | 19664    | Dhaka      | 18      | 2110    |
| 103     | Farabi  | 17223    | Rajshahi   | 20      | 2111    |
| 104     | Rasel   | 18334    | Sylet      | 22      | 2112    |
| 105     | Sumon   | 18760    | Chittagong | 20      | 2110    |

### 4. insert into ticket\_counter

(tc\_id, tc\_type, tc\_no) values (511, 'A', 34565)

insert into ticket\_counter

(tc\_id, tc\_type, tc\_no) values (512, 'A', 44321)

insert into ticket\_counter

(tc\_id, tc\_type, tc\_no) values (513, 'B', 35467)

insert into ticket\_counter

(tc\_id, tc\_type, tc\_no) values (514, 'B', 35565)

insert into ticket\_counter

(tc\_id, tc\_type, tc\_no) values (515, 'B', 56733)

select \* from ticket\_counter

Results

Explain

Describe

Saved SQL

History

| TC_ID | TC_TYPE | TC_NO |
|-------|---------|-------|
| 511   | A       | 34565 |
| 512   | A       | 44321 |
| 513   | B       | 35467 |
| 514   | B       | 35565 |
| 515   | B       | 56733 |

5. create table ticket\_counter2

```
(
stc_id varchar2(10),
s_id varchar2(10),
tc_id varchar2(10)
)
```

Select \* from ticket\_counter2

| Results | Explain | Describe | Saved SQL | History |
|---------|---------|----------|-----------|---------|
| STC_ID  | S_ID    | TC_ID    |           |         |
| 221     | 101     | 511      |           |         |
| 222     | 102     | 512      |           |         |
| 223     | 103     | 513      |           |         |
| 224     | 104     | 514      |           |         |
| 225     | 105     | 515      |           |         |

6. insert into manager

(m\_id, m\_name, m\_address, m\_phone, a\_id) values (201, 'Eshna', 'Dhaka', 015964, 1001)

insert into manager

(m\_id, m\_name, m\_address, m\_phone, a\_id) values (202, 'Jahid', 'Dhaka', 013664, 1001)

insert into manager

(m\_id, m\_name, m\_address, m\_phone, a\_id) values (203, 'Bappy', 'Delhi', 015964, 1003)

insert into manager

(m\_id, m\_name, m\_address, m\_phone, a\_id) values (204, 'Mahfuz', 'Khulna', 019454, 1002)

insert into manager

(m\_id, m\_name, m\_address, m\_phone, a\_id) values (205, 'Salman', 'Dhaka', 017894, 1001)

select \* from manager

| Results | Explain | Describe  | Saved SQL | History |
|---------|---------|-----------|-----------|---------|
| M_ID    | M_NAME  | M_ADDRESS | M_PHONE   | A_ID    |
| 201     | Eshna   | Dhaka     | 15964     | 1001    |
| 202     | Jahid   | Dhaka     | 13664     | 1001    |
| 203     | Bappy   | Delhi     | 15964     | 1003    |
| 204     | Mahfuz  | Khulna    | 19454     | 1002    |
| 205     | Salman  | Dhaka     | 17894     | 1001    |

## 7. insert into hall

(hall\_id, hall\_name, hall\_seats, m\_id) values (2110, 'Padma', 400, 201)

insert into hall

(hall\_id, hall\_name, hall\_seats, m\_id) values (2111, 'Meghna', 370, 201)

insert into hall

(hall\_id, hall\_name, hall\_seats, m\_id) values (2112, 'Jamuna', 340, 202)

insert into hall

(hall\_id, hall\_name, hall\_seats, m\_id) values (2113, 'Karnofuli', 350, 203)

insert into hall

(hall\_id, hall\_name, hall\_seats, m\_id) values (2114, 'Shitalakkha', 300, 203)

select \* from hall

**Results** Explain Describe Saved SQL History

| HALL_ID | HALL_NAME   | HALL_SEATS | M_ID |
|---------|-------------|------------|------|
| 2110    | Padma       | 400        | 201  |
| 2111    | Meghna      | 370        | 201  |
| 2112    | Jamuna      | 340        | 202  |
| 2113    | Karnofuli   | 350        | 203  |
| 2114    | Shitalakkha | 300        | 203  |

## 8. insert into movies

(movie\_id, movie\_name, movie\_type, movie\_time) values (5101, 'Avengers', 'A', '15:00')

insert into movies

(movie\_id, movie\_name, movie\_type, movie\_time) values (5102, 'Skyfall', 'A', '20:00')

insert into movies

(movie\_id, movie\_name, movie\_type, movie\_time) values (5103, 'Mission Impossible 3', 'A', '10:00')

insert into movies

(movie\_id, movie\_name, movie\_type, movie\_time) values (5104, 'Bharat', 'B', '15:00')

insert into movies

(movie\_id, movie\_name, movie\_type, movie\_time) values (5105, 'Dilwale', 'B', '13:00')

select \* from movies

**Results** Explain Describe Saved SQL History

| MOVIE_ID | MOVIE_NAME           | MOVIE_TYPE | MOVIE_TIME |
|----------|----------------------|------------|------------|
| 5101     | Avengers             | A          | 15:00      |
| 5102     | Skyfall              | A          | 20:00      |
| 5103     | Mission Impossible 3 | A          | 10:00      |
| 5104     | Bharat               | B          | 15:00      |
| 5105     | Dilwale              | B          | 13:00      |

### 9. insert into Hall\_Movie

(hm\_id, hall\_id, movie\_id) values (311, 2110, 5101)

insert into Hall\_Movie

(hm\_id, hall\_id, movie\_id) values (312, 2110, 5102)

insert into Hall\_Movie

(hm\_id, hall\_id, movie\_id) values (313, 2112, 5103)

insert into Hall\_Movie

(hm\_id, hall\_id, movie\_id) values (314, 2112, 5104)

insert into Hall\_Movie

(hm\_id, hall\_id, movie\_id) values (315, 2111, 5105)

select \* from Hall\_Movie

**Results** Explain Describe Saved SQL History

| HM_ID | HALL_ID | MOVIE_ID |
|-------|---------|----------|
| 311   | 2110    | 5101     |
| 312   | 2110    | 5102     |
| 313   | 2112    | 5103     |
| 314   | 2112    | 5104     |
| 315   | 2111    | 5105     |

### 10. insert into Ticket\_seller

(ts\_id, ts\_name, ts\_phone, ts\_address, ts\_age, tc\_id) values (771, 'Moni', 013110, 'Rajshahi', 25, 511)

insert into Ticket\_seller

(ts\_id, ts\_name, ts\_phone, ts\_address, ts\_age, tc\_id) values (772, 'Lijon', 012910, 'Dhaka', 23, 512)

insert into Ticket\_seller

(ts\_id, ts\_name, ts\_phone, ts\_address, ts\_age, tc\_id) values (773, 'Abir', 013110, 'Rajshahi', 20, 513)

insert into Ticket\_seller

(ts\_id, ts\_name, ts\_phone, ts\_address, ts\_age, tc\_id) values (774, 'Niloy', 013110, 'Rajshahi', 26, 514)

insert into Ticket\_seller

(ts\_id, ts\_name, ts\_phone, ts\_address, ts\_age, tc\_id) values (775, 'Farhan', 013110, 'Rajshahi', 22, 515)

select \* from Ticket\_seller

**Results** Explain Describe Saved SQL History

| TS_ID | TS_NAME | TS_PHONE | TS_ADDRESS | TS_AGE | TC_ID |
|-------|---------|----------|------------|--------|-------|
| 771   | Moni    | 13110    | Rajshahi   | 25     | 511   |
| 772   | Lijon   | 12910    | Dhaka      | 23     | 512   |
| 773   | Abir    | 13110    | Rajshahi   | 20     | 513   |
| 774   | Niloy   | 13110    | Rajshahi   | 26     | 514   |
| 775   | Farhan  | 13110    | Rajshahi   | 22     | 515   |

### 11. insert into Ticket

(t\_id, t\_type, t\_price, t\_date, ts\_id) values (6111, 'Reserved', 1000, to\_date('22/8/2019','dd mm yy'), 771)

insert into Ticket

(t\_id, t\_type, t\_price, t\_date, ts\_id) values (6122, 'VIP', 800, to\_date('22/8/2019','dd mm yy'), 772)

insert into Ticket

(t\_id, t\_type, t\_price, t\_date, ts\_id) values (6133, 'VIP', 1000, to\_date('22/8/2019','dd mm yy'), 773)

insert into Ticket

(t\_id, t\_type, t\_price, t\_date, ts\_id) values (6144, 'Oneday Pass', 2000, to\_date('22/8/2019','dd mm yy'), 774)

insert into Ticket

(t\_id, t\_type, t\_price, t\_date, ts\_id) values (6155, 'Reserved', 1200, to\_date('22/8/2019','dd mm yy'), 775)

select \* from Ticket

| Results | Explain     | Describe | Saved SQL | History |
|---------|-------------|----------|-----------|---------|
| T_ID    | T_TYPE      | T_PRICE  | T_DATE    | TS_ID   |
| 6111    | Reserved    | 1000     | 22-AUG-19 | 771     |
| 6122    | VIP         | 800      | 22-AUG-19 | 772     |
| 6133    | VIP         | 1000     | 22-AUG-19 | 773     |
| 6144    | Oneday Pass | 2000     | 22-AUG-19 | 774     |
| 6155    | Reserved    | 1200     | 22-AUG-19 | 775     |

### 12. insert into customer

(c\_id, c\_name, c\_address, c\_phone, a\_id) values (821, 'Ayan', 'Mirpur', 013094, 1001)

insert into customer

(c\_id, c\_name, c\_address, c\_phone, a\_id) values (822, 'Nusrat', 'Gulshan', 019644, 1001)

insert into customer

(c\_id, c\_name, c\_address, c\_phone, a\_id) values (823, 'Prionty', 'Banani', 015871, 1005)

insert into customer

(c\_id, c\_name, c\_address, c\_phone, a\_id) values (824, 'Nihal', 'Rupganj', 017744, 1005)

insert into customer

(c\_id, c\_name, c\_address, c\_phone, a\_id) values (825, 'Shathi', 'Jatrabari', 013094, 1001)

select \* from customer

| Results | Explain | Describe  | Saved SQL | History |
|---------|---------|-----------|-----------|---------|
| C_ID    | C_NAME  | C_ADDRESS | C_PHONE   | A_ID    |
| 821     | Ayan    | Mirpur    | 13094     | 1001    |
| 822     | Nusrat  | Gulshan   | 19644     | 1001    |
| 823     | Prionty | Banani    | 15871     | 1005    |
| 824     | Nihal   | Rupganj   | 17744     | 1005    |
| 825     | Shathi  | Jatrabari | 13094     | 1001    |

```

13. insert into Customer_ticket
(ticu_id, t_id, c_id) values (991, 6111, 821)
insert into Customer_ticket
(ticu_id, t_id, c_id) values (992, 6111, 822)
insert into Customer_ticket
(ticu_id, t_id, c_id) values (993, 6111, 823)
insert into Customer_ticket
(ticu_id, t_id, c_id) values (994, 6113, 824)
insert into Customer_ticket
(ticu_id, t_id, c_id) values (995, 6114, 825)

```

```
select * from Customer_ticket
```

**Results** Explain Describe Saved SQL History

| TICU_ID | T_ID | C_ID |
|---------|------|------|
| 991     | 6111 | 821  |
| 992     | 6111 | 822  |
| 993     | 6111 | 823  |
| 994     | 6113 | 824  |
| 995     | 6114 | 825  |

## ❖ Query

### Subquery:

1. Display the name and stuff id for all staff whose age is higher than manager id 202? (Staff Table)

```
select s_name, s_id from staff where s_age>
(select s_age from staff where m_id=202)
```

| S_NAME | S_ID |
|--------|------|
| Farabi | 103  |
| Rasel  | 104  |
| Sumon  | 105  |

2. Display the name, address, phone number for all staff who works in Jamuna Hall? (Staff2 Table, Hall Table)

```
select s_name, s_address, s_phone from staff2
where hall_id=
 (select hall_id from hall where hall_name='Jamuna')
```

| S_NAME | S_ADDRESS | S_PHONE |
|--------|-----------|---------|
| Rasel  | Sylet     | 18334   |

3. Display the ts\_id, ts\_name, ts\_address and ts\_age for all ticket seller whose tick counter no is 44321 (Ticket\_Counter Table, ticket\_seller Table)

```
select ts_id, ts_name, ts_address, ts_age from ticket_seller
where tc_id=
 (select tc_id from ticket_counter where tc_no=44321)
```

| TS_ID | TS_NAME | TS_ADDRESS | TS_AGE |
|-------|---------|------------|--------|
| 772   | Lijon   | Dhaka      | 23     |

## Join:

1. Find out the stc\_id, staff name and address from staff table ?

Ans:   select t.stc\_id, s.s\_name, s.s\_address from ticket\_counter2 t, staff2 s  
          where t.s\_id = s.s\_id

| Results | Explain | Describe   | Saved SQL | History |
|---------|---------|------------|-----------|---------|
|         |         |            |           |         |
| STC_ID  | S_NAME  | S_ADDRESS  |           |         |
| 221     | Fahad   | Dhaka      |           |         |
| 222     | Fahim   | Dhaka      |           |         |
| 223     | Farabi  | Rajshahi   |           |         |
| 224     | Rasel   | Sylet      |           |         |
| 225     | Sumon   | Chittagong |           |         |





### Single row function:

Display average price of ticket by their t\_date?

Ans:   select avg(t\_price) from ticket  
         group by t\_date

| Results                                                    | Explain | Describe | Saved SQL | History |
|------------------------------------------------------------|---------|----------|-----------|---------|
|                                                            |         |          |           |         |
| AVG(T_PRICE)                                               |         |          |           |         |
| 1200                                                       |         |          |           |         |
| 1 rows returned in 0.00 seconds <a href="#">CSV Export</a> |         |          |           |         |

### Multiple row function:

Display sum of price of all ticket and name the column as total price?

Ans:   select sum(t\_price) as "Total Price" from ticket  
         group by t\_id

| Total Price |
|-------------|
| 1000        |
| 2000        |
| 1200        |
| 1000        |
| 800         |

## ❖ Conclusion

After all the hard-works we finally created the Database management system of Star Cineplex. By this system all the workers, officials and customers can get a hassle-free service from our management service. We face some problems, but by the help of our groupmates we can say that we are finally successful. We are hopeful that in near future we will able to create a different Database management system.

THE END