

LAB FAT- TUESDAY- SET 1

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Consider the following relations for a movie database application:

Movie(mid, name, dateofrelease, aid)

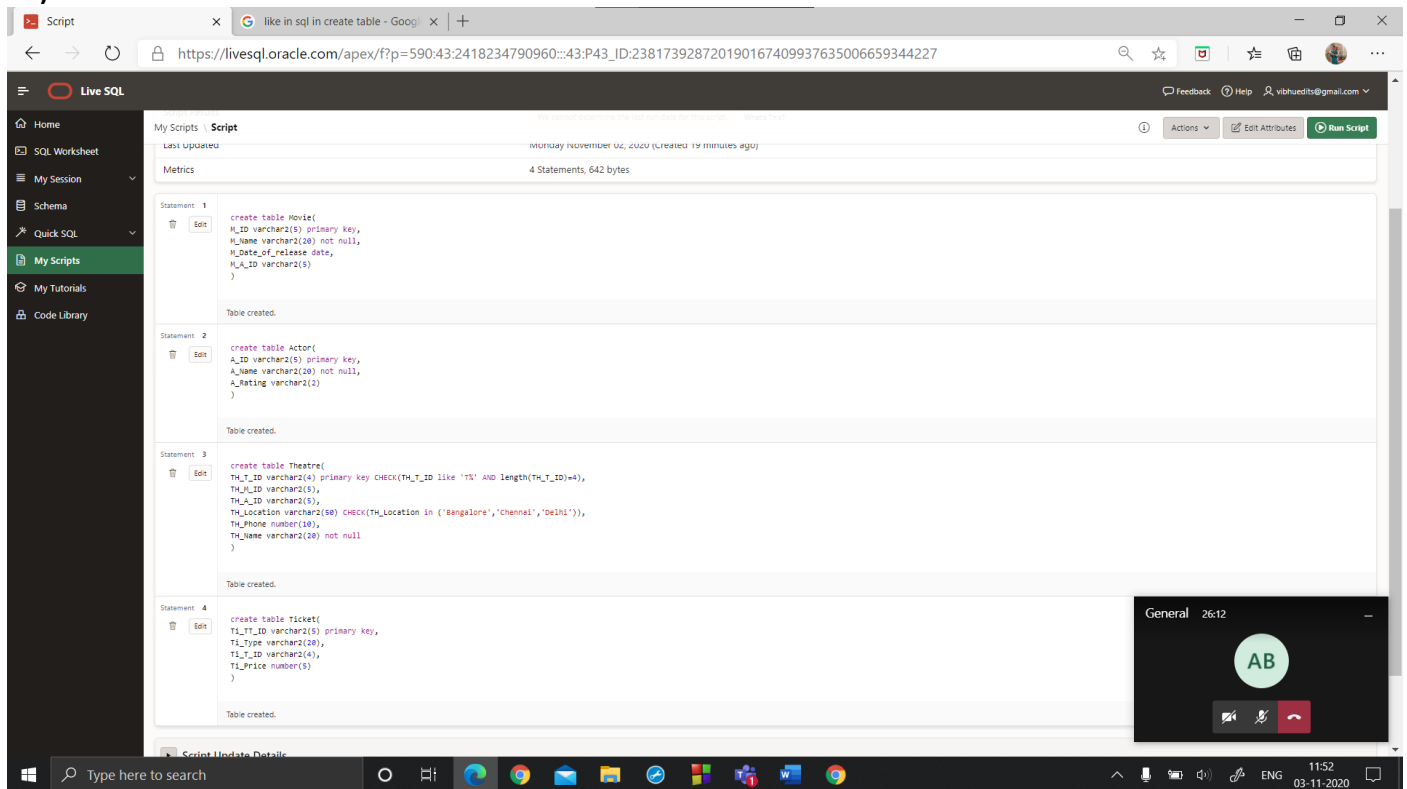
Actor(aid, name, rating)

Theatre(tid, mid, aid, location, phone, name)

Ticket(ttid, type, tid, price)

Q1) Create tables as shown above.

A1) CREATE TABLE SCREENSHOTS:



CODE:

```
create table Movie(  
M_ID varchar2(5) primary key,  
M_Name varchar2(20) not null,  
M_Date_of_release date,  
M_A_ID varchar2(5)  
);
```

```
create table Actor(  
A_ID varchar2(5) primary key,  
A_Name varchar2(20) not null,  
A_Rating varchar2(2)  
);
```

```
create table Theatre(  
TH_T_ID varchar2(4) primary key CHECK(TH_T_ID like 'T%' AND length(TH_T_ID)=4),  
TH_M_ID varchar2(5),
```

```
TH_A_ID varchar2(5),
TH_Location varchar2(50) CHECK(TH_Location in ('Bangalore','Chennai','Delhi')),
TH_Phone number(10),
TH_Name varchar2(20) not null
);
```

```
create table Ticket(
Ti_TT_ID varchar2(5) primary key,
Ti_Type varchar2(20),
Ti_T_ID varchar2(4),
Ti_Price number(5)
);
```

FOREIGN KEYS:

The screenshot displays the Live SQL web application interface. On the left is a dark sidebar with navigation links: Home, SQL Worksheet (selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled 'SQL Worksheet' and contains a code editor with the following SQL script:

```
1 ALTER TABLE Movie
2 ADD FOREIGN KEY (M_A_ID) REFERENCES Actor(A_ID);
3
4 ALTER TABLE Theatre
5 ADD FOREIGN KEY (TH_M_ID) REFERENCES Movie(M_ID);
6
7 ALTER TABLE Theatre
8 ADD FOREIGN KEY (TH_A_ID) REFERENCES Actor(A_ID);
9
10 ALTER TABLE Ticket
11 ADD FOREIGN KEY (Ti_T_ID) REFERENCES Theatre(TH_T_ID);
```

Below the code editor, the execution results are shown. The first result is an error: 'ORA-02275: such a referential constraint already exists in the table'. The subsequent three results are 'Table altered.'.

At the bottom of the interface, there is a footer with Oracle branding, copyright information (© 2020 Oracle Corporation), and a list of links including 'Privacy', 'Terms of Use', 'Oracle Learning Library', 'Ask Tom', 'Dev Gym', 'Database Doc 19c', '18c', '12c', and 'Follow on Twitter'. It also mentions 'Live SQL 20.3.1, running Oracle Database 19c Enterprise Edition - 19.8.0.0.0' and 'Built with ❤️ using Oracle APEX'.

In the bottom right corner, there is a small video call window titled 'General' with a timer at '48:29' and a participant icon labeled 'AB'.

Q2) Add a new attribute named “budget” to the table “Movie”.

A2)

Alter table Movie add budget float(5);

The screenshot shows the Oracle Live SQL web interface. On the left is a dark sidebar with navigation links: Home, SQL Worksheet (selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled 'SQL Worksheet' and contains a single line of SQL code: `1 alter table Movie add budget float(5);`. Below the code editor, a message states 'Table altered.' The top right of the interface includes links for Feedback, Help, and a user profile (vibhuedits@gmail.com), along with buttons for Clear, Find, Actions, Save, and Run. At the bottom, there is a footer with Oracle branding and version information: '© 2020 Oracle Corporation · Privacy · Terms of Use', 'Oracle Learning Library · Ask Tom · Dev Gym · Database Doc 19c · 18c · 12c · Follow on Twitter', and 'Live SQL 20.3.1, running Oracle Database 19c Enterprise Edition - 19.8.0.0.0 Built with ♥ using Oracle APEX'. A small video call window is visible in the bottom right corner.

Q3) Populate the table as given below:

A3)

```
insert into Movie values('M1','Dreams',TO_DATE('21/10/2018','DD/MM/YYYY'),'A1',21.1);
insert into Movie values('M2','Love',TO_DATE('22/05/2019','DD/MM/YYYY'),'A2',40.2);
insert into Movie values('M3','World',TO_DATE('25/05/2020','DD/MM/YYYY'),'A4',50);
insert into Movie values('M4','Happiness',TO_DATE('30/10/1995','DD/MM/YYYY'),'A5',2.5);
```

```
insert into Actor values('A1','Bob',4);
insert into Actor values('A2','Alice',3);
insert into Actor values('A3','James',1);
insert into Actor values('A4','Jacob',4);
insert into Actor values('A5','Paul',3);
```

```
insert into Theatre values('T001','M1','A1','Bangalore',123456,'Agni');
insert into Theatre values('T002','M2','A3','Chennai',234567,'Jwala');
insert into Theatre values('T003','M3','A2','Delhi',345678,'Universe');
insert into Theatre values('T004','M4','A4','Chennai',567891,'Fortune');
```

```
insert into Ticket values('T1','VIP','T001',500);
insert into Ticket values('T2','VVIP','T002',1000);
insert into Ticket values('T3','VIP','T003',400);
insert into Ticket values('T4','VIP','T002',600);
insert into Ticket values('T5','VVIP','T004',1500);
```

Q4) Modify the rating of the actor “Alice” to 4.

A4)

```
update Actor SET A_Rating=4 WHERE A_Name='Alice';  
select * from Actor;
```

```
1  update Actor SET A_Rating=4 WHERE A_Name='Alice';  
2  select * from Actor;
```

1 row(s) updated.

A_ID	A_NAME	A_RATING
A2	Alice	4
A3	James	1
A4	Jacob	4
A5	Paul	3
A1	Bob	4

[Download CSV](#)

5 rows selected.

Q5) Display the details of all tables with values.

A5)

```
Select * from Movie;  
Select * from Actor;  
Select * from Theatre;  
Select * from Ticket;
```

M_ID	M_NAME	M_DATE_OF_RELEASE	M_A_ID	BUDGET
M2	Love	22-MAY-19	A2	40
M3	World	25-MAY-20	A4	50
M4	Happiness	30-OCT-95	A5	2.5
M1	Dreams	21-OCT-18	A1	21

[Download CSV](#)

4 rows selected.

A_ID	A_NAME	A_RATING
A2	Alice	3
A3	James	1
A4	Jacob	4
A5	Paul	3
A1	Bob	4

[Download CSV](#)

5 rows selected.

TH_T_ID	TH_M_ID	TH_A_ID	TH_LOCATION	TH_PHONE	TH_NAME
T001	M1	A1	Bangalore	123456	Agni
T002	M2	A3	Chennai	234567	Jwala
T003	M3	A2	Delhi	345678	Universe
T004	M4	A4	Chennai	567891	Fortune

[Download CSV](#)

4 rows selected.

TI_TT_ID	TI_TYPE	TI_T_ID	TI_PRICE
T2	VVIP	T002	1000
T3	VIP	T003	400
T4	VIP	T002	600
T5	VVIP	T004	1500
T1	VIP	T001	500

[Download CSV](#)

5 rows selected.

Q6) Display the actor details in the ascending order of rating.

A6)

```
select * from Actor order by A_Rating;
```

```
1 select * from Actor order by A_Rating;
```

A_ID	A_NAME	A_RATING
A3	James	1
A5	Paul	3
A1	Bob	4
A2	Alice	4
A4	Jacob	4

[Download CSV](#)

5 rows selected.

Q7) Display the types of tickets available in the theatre "Jwala".

A7)

```
select Ti_Type from Ticket INNER JOIN Theatre ON Ticket.Ti_T_ID=Theatre.TH_T_ID WHERE  
Theatre.TH_Name='Jwala';
```

```
1 select Ti_Type from Ticket INNER JOIN Theatre ON Ticket.Ti_T_ID=Theatre.TH_T_ID WHERE Theatre.TH_Name='Jwala';
```

TI_TYPE
VVIP
VIP

[Download CSV](#)

2 rows selected.

**Q8) Find the movie names and date of release of all movies by the actors with a rating greater than or equal to 3.
(Use subqueries).**

A8)

```
select Movie.M_Name,Movie.M_Date_of_release from Movie WHERE Movie.M_A_ID in(select Actor.A_ID  
from Actor WHERE Actor.A_Rating>3);
```

1	select Movie.M_Name,Movie.M_Date_of_release from Movie WHERE Movie.M_A_ID in(select Actor.A_ID from Actor WHERE Actor.A_Rating>3);
---	--

M_NAME	M_DATE_OF_RELEASE
Love	22-MAY-19
World	25-MAY-20
Dreams	21-OCT-18

Download CSV
3 rows selected.

Q9) Display the theatre id, location and phone number of theatres with the name starting with the letter “A”.
A9)

select TH_T_ID,TH_Location,TH_Phone from Theatre WHERE TH_Name like 'A%';

1	select TH_T_ID,TH_Location,TH_Phone from Theatre WHERE TH_Name like 'A%';
---	---

TH_T_ID	TH_LOCATION	TH_PHONE
T001	Bangalore	123456

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Q10) Display the details of theatres where the movies by the actor “Jacob” are played. (Use joins).
A10)

select * from Theatre INNER JOIN Actor ON Theatre.TH_A_ID=Actor.A_ID WHERE Actor.A_Name='Jacob';

1	select * from Theatre INNER JOIN Actor ON Theatre.TH_A_ID=Actor.A_ID WHERE Actor.A_Name='Jacob';
---	--

TH_T_ID	TH_M_ID	TH_A_ID	TH_LOCATION	TH_PHONE	TH_NAME	A_ID	A_NAME	A_RATING
T004	M4	A4	Chennai	567891	Fortune	A4	Jacob	4

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Q11) Use PL/SQL to display the date of release and budget of the movie “Love”.
A11)

```
create or replace Procedure MovDet(MovName Movie.M_Name%type) is
MovBudget Movie.budget %type;
MovDor Movie.M_Date_of_release %type;
begin
select M_Date_of_release,budget into MovDor,MovBudget from movie where M_Name = MovName;
dbms_output.put_line('Name: '||MovName);
dbms_output.put_line('Date Of Release: '||MovDOR);
dbms_output.put_line('Budget: '||MovBudget);
exception
when no_data_found then
dbms_output.put_line ('no data found');
end;
```

```
1  create or replace Procedure MovDet(MovName Movie.M_Name%type) is
2  MovBudget Movie.budget %type;
3  MovDor Movie.M_Date_of_release %type;
4  begin
5  select M_Date_of_release,budget into MovDor,MovBudget from movie where M_Name = MovName;
6  dbms_output.put_line('Name: '||MovName);
7  dbms_output.put_line('Date Of Release: '||MovDOR);
8  dbms_output.put_line('Budget: '||MovBudget);
9  exception
10 when no_data_found then
11 dbms_output.put_line ('no data found');
12 end;
```

Procedure created.