CSE 2003

DATABASE MANAGEMENT SYSTEM

Embedded Lab Component

Final Assessment Test

SET - 1

November 3, 2020

L11+L12 | SJT419

FALL SEMESTER 2020–21

by

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Questions

1. Create tables as instructed.
2. Add a new attribute named "budget" to the table "Movie".
3. Populate the table as given.
4. Modify the rating of the actor "Alice" to 4.
5. Display the details of all tables with values.
6. Display the actor details in the ascending order of rating.
7. Display the types of tickets available in the theatre "Jwala".
8. 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)
9. Display the theatre id, location and phone number of theatres with the name starting with the letter "A".
10. Display the details of theatres where the movies by the actor "Jacob" are played. (Use joins)
11. Use PL/SQL to display the date of release and budget of the movie "Love".

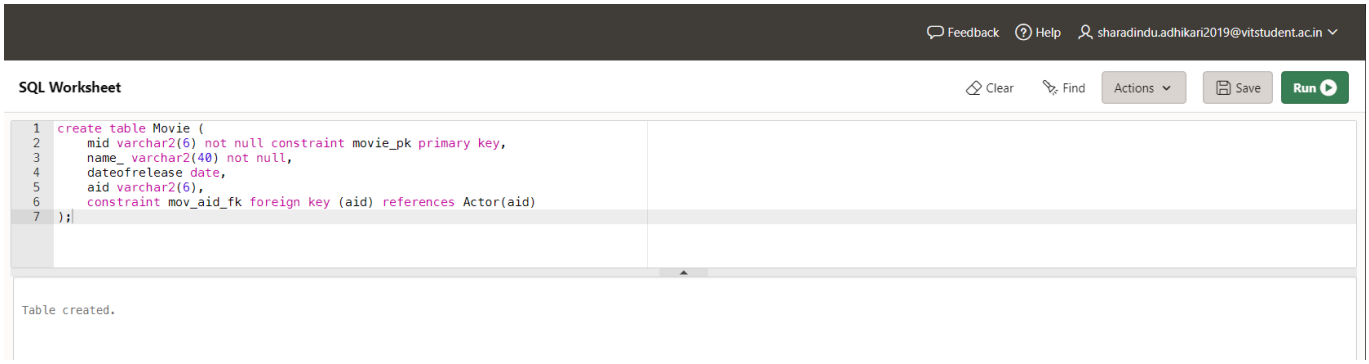
Solutions

#1. Table creation

Worksheet:

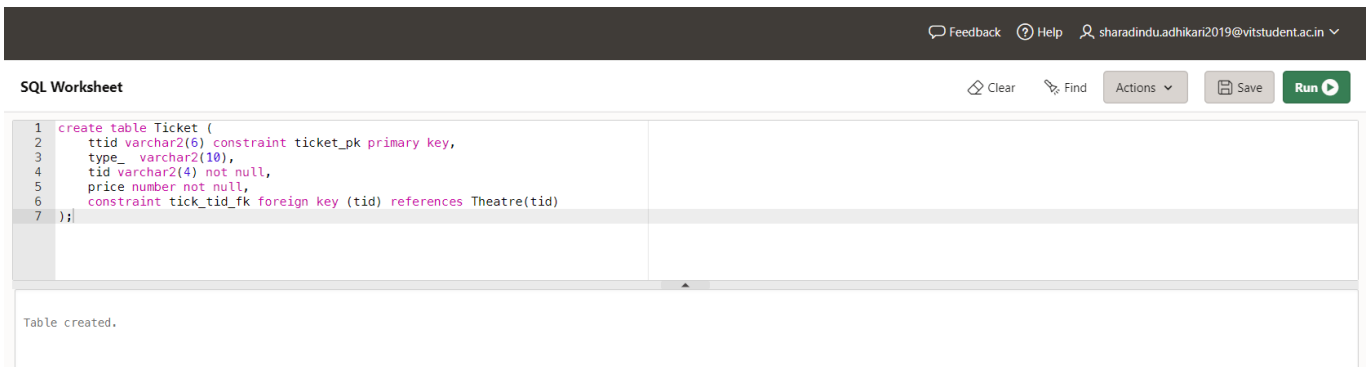
```
create table Actor (
    aid varchar2(6) constraint actor_pk primary key,
    name_ varchar2(50) not null,
    rating number
);
```


```
create table Movie (
    mid varchar2(6) not null constraint movie_pk primary key,
    name_ varchar2(40) not null,
    dateofrelease date,
    aid varchar2(6),
    constraint mov_aid_fk foreign key (aid) references Actor(aid)
);
```

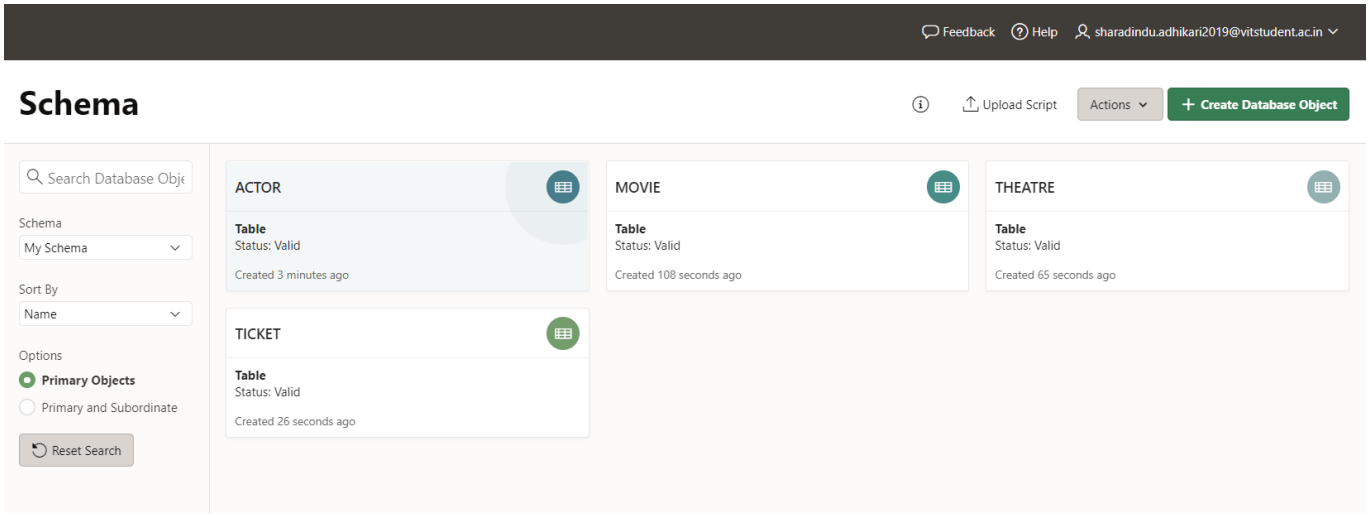



```
create table Theatre (
    tid varchar2(4) constraint theatre_pk primary key,
    mid varchar2(6),
    aid varchar2(6),
    location_ varchar2(50) constraint thea_loc_chk check (location_='Bangalore' OR
location_='Chennai' OR location_='Delhi') ,
    phone varchar2(10),
    name varchar2(50),
    constraint thea_tid_chk check (tid like 'T___'),
    constraint thea_mid_fk foreign key (mid) references Movie(mid),
    constraint thea_aid_fk foreign key (aid) references Actor(aid)
);
```


```
create table Ticket (
    ttid varchar2(6) constraint ticket_pk primary key,
    type_  varchar2(10),
    tid varchar2(4) not null,
    price number not null,
    constraint tick_tid_fk foreign key (tid) references Theatre(tid)
);
```



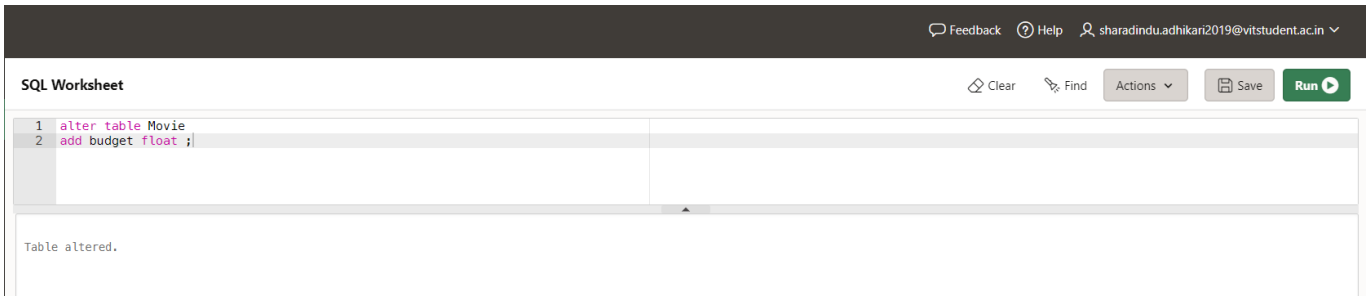
Schema:



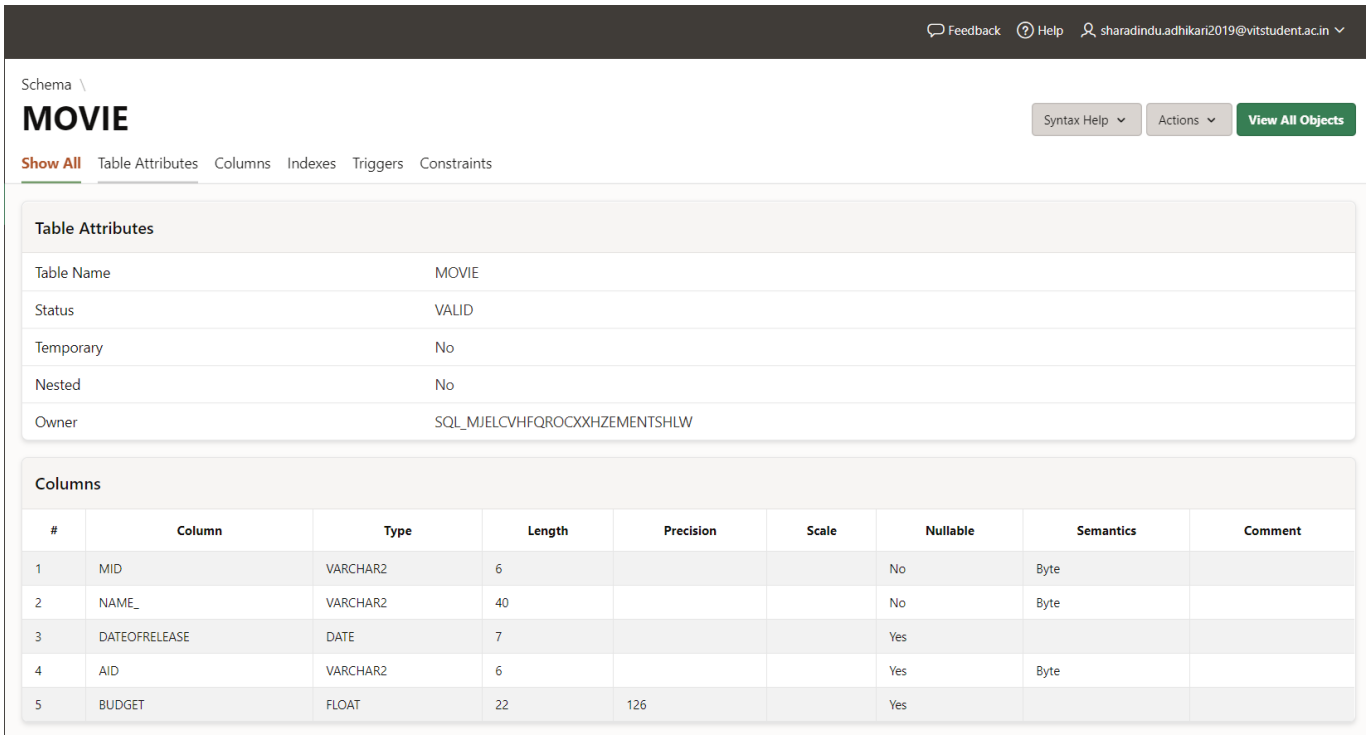
#2.Addition of an attribute

```
alter table Movie
add budget float ;
```

Worksheet:

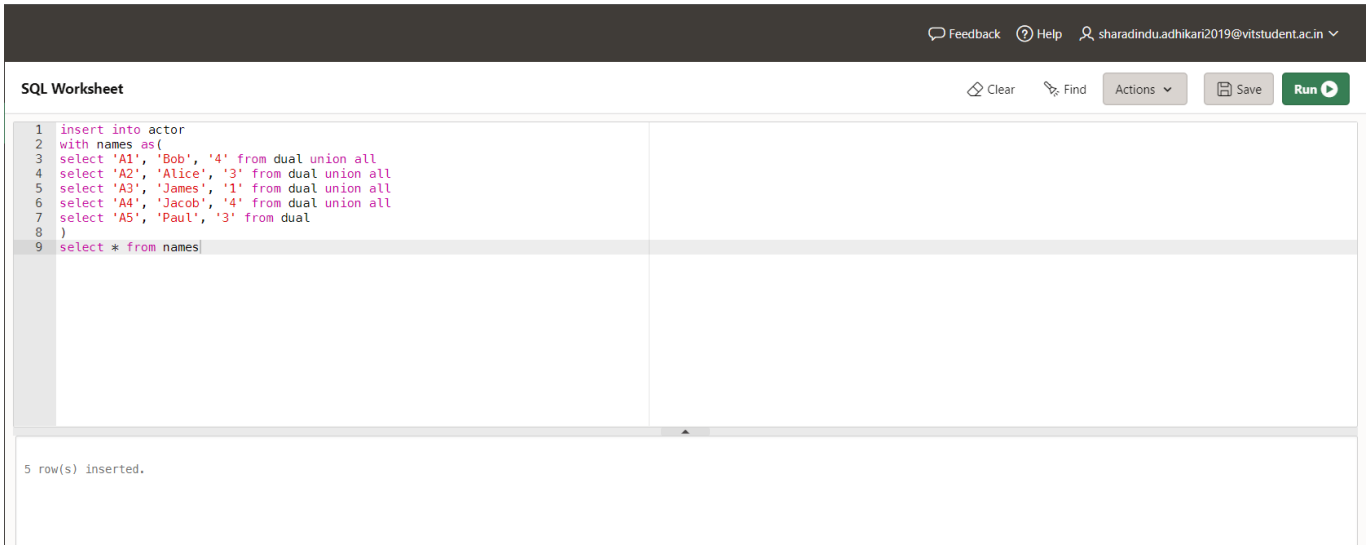


Schema:

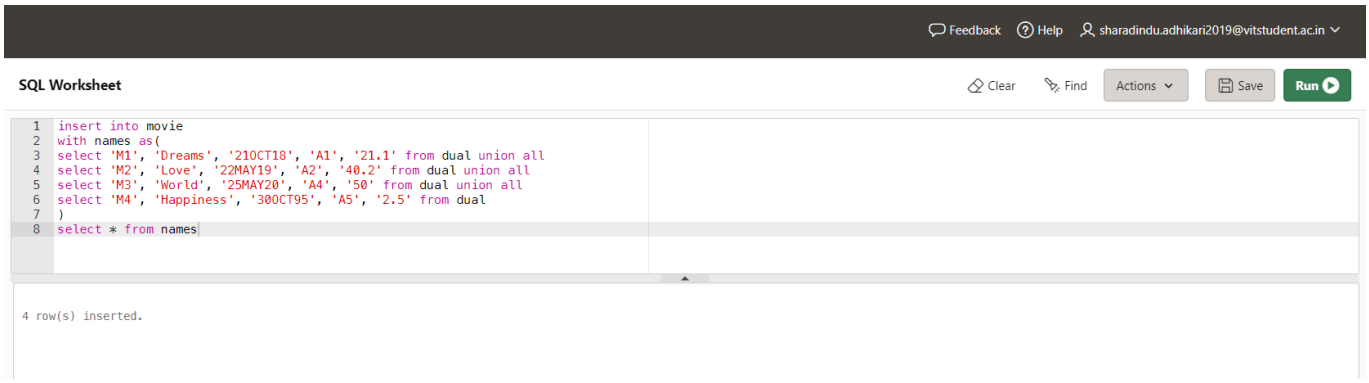


#3. Table Population

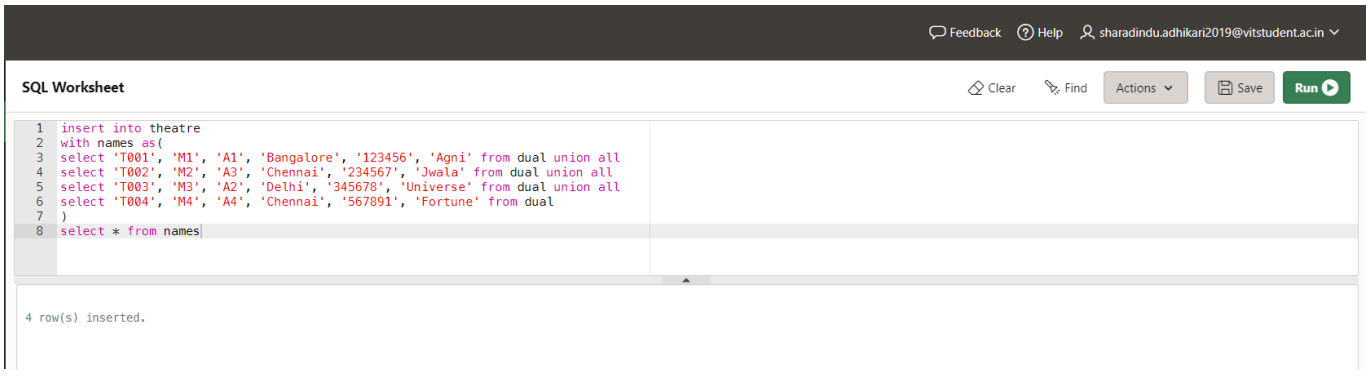
```
insert into actor
with names as(
select 'A1', 'Bob', '4' from dual union all
select 'A2', 'Alice', '3' from dual union all
select 'A3', 'James', '1' from dual union all
select 'A4', 'Jacob', '4' from dual union all
select 'A5', 'Paul', '3' from dual
)
select * from names
```



```
insert into movie
with names as(
select 'M1', 'Dreams', '21OCT18', 'A1', '21.1' from dual union all
select 'M2', 'Love', '22MAY19', 'A2', '40.2' from dual union all
select 'M3', 'World', '25MAY20', 'A4', '50' from dual union all
select 'M4', 'Happiness', '30OCT95', 'A5', '2.5' from dual
)
select * from names
```



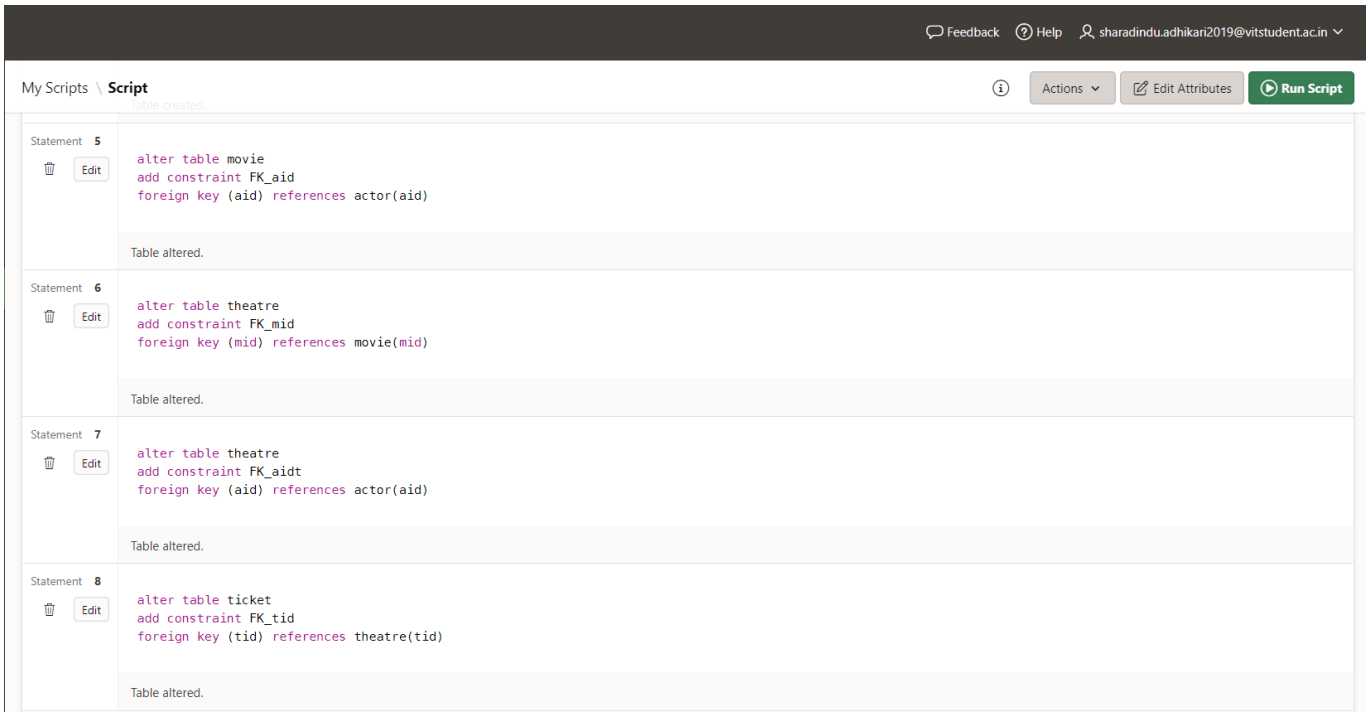

```
insert into theatre
with names as(
select 'T001', 'M1', 'A1', 'Bangalore', '123456', 'Agni' from dual union all
select 'T002', 'M2', 'A3', 'Chennai', '234567', 'Jwala' from dual union all
select 'T003', 'M3', 'A2', 'Delhi', '345678', 'Universe' from dual union all
select 'T004', 'M4', 'A4', 'Chennai', '567891', 'Fortune' from dual
)
select * from names
```




```
insert into ticket
with names as(
select 'T1', 'VIP', 'T001', '500' from dual union all
select 'T2', 'VVIP', 'T002', '1000' from dual union all
select 'T3', 'VIP', 'T003', '400' from dual union all
select 'T4', 'VIP', 'T002', '600' from dual union all
select 'T5', 'VVIP', 'T004', '1500' from dual
)
select * from names
```

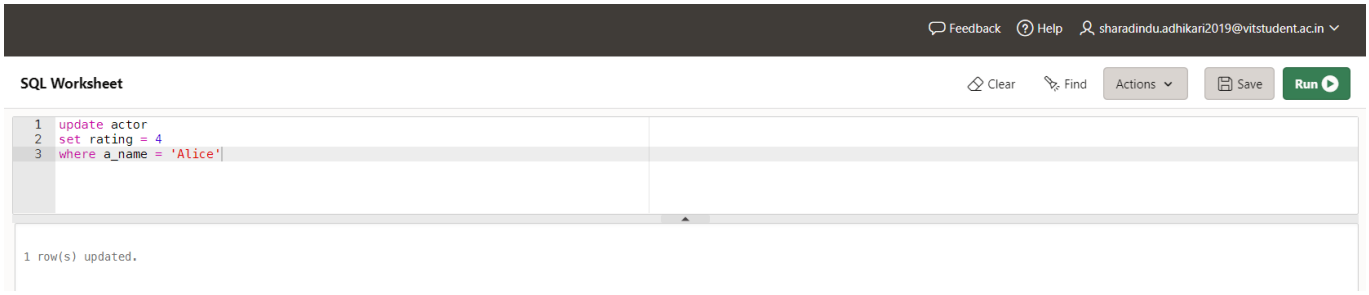
#.Foreign key implementation:

```
alter table movie
add constraint FK_aid
foreign key (aid) references actor(aid)

alter table theatre
add constraint FK_mid
foreign key (mid) references movie(mid)

alter table theatre
add constraint FK_aidt
foreign key (aid) references actor(aid)

alter table ticket
add constraint FK_tid
foreign key (tid) references theatre(tid)
```



#4.

```
update actor
set rating = 4
where a_name = 'Alice'
```



#5.

```
select * from Movie;
select * from Actor;
select * from theatre;
select * from ticket;
```

Live SQL Feedback Help sharadindu.adhikari2019@vitstudent.ac.in

SQL Worksheet Clear Find Actions Save Run

```
1  select * from Movie;
2  select * from Actor;
3  select * from theatre;
4  select * from ticket;
```

MID	M_NAME	DOR	AID	BUDGET
M1	Dreams	21-OCT-18	A1	21.1
M2	Love	22-MAY-19	A2	40.2
M3	World	25-MAY-20	A4	50
M4	Happiness	30-OCT-95	A5	2.5

Download CSV
4 rows selected.

AID	A_NAME	RATING
A1	Bob	4
A2	Alice	4
A3	James	1
A4	Jacob	4
A5	Paul	3

Download CSV
5 rows selected.

TID	MID	AID	T_LOCATION	PHONE	T_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.

TTID	TT_TYPE	TID	PRICE
T1	VIP	T001	500
T2	VVIP	T002	1000
T3	VIP	T003	400
T4	VIP	T002	600
T5	VVIP	T004	1500

Download CSV
5 rows selected.

#6.

```
select * from actor order by rating asc;
```

AID	A_NAME	RATING
A3	James	1
A5	Paul	3
A2	Alice	4
A4	Jacob	4
A1	Bob	4

Download CSV
5 rows selected.

#7.

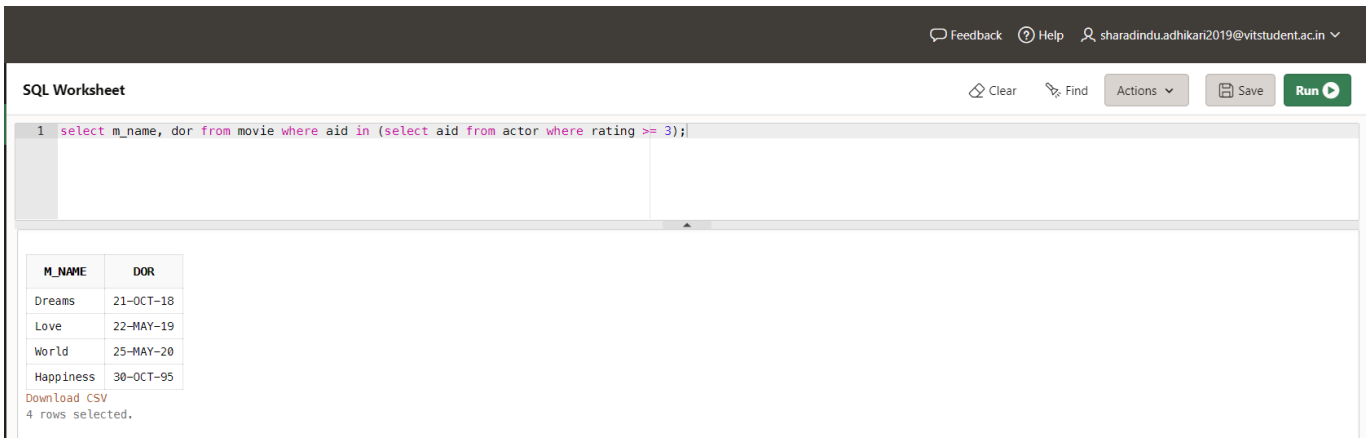
```
select tt_type from ticket where tid = (select tid from theatre where t_name='Jwala');
```

TT_TYPE
VVIP
VIP

Download CSV
2 rows selected.

#8.

```
select m_name, dor from movie where aid in (select aid from actor where rating >= 3);
```



M_NAME	DOR
Dreams	21-OCT-18
Love	22-MAY-19
World	25-MAY-20
Happiness	30-OCT-95

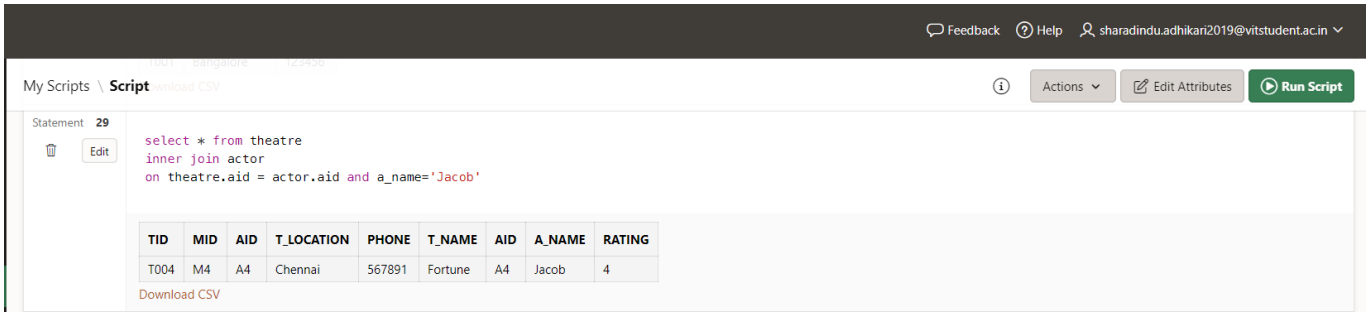
Download CSV
4 rows selected.

#9.

```
select tid, t_location, phone from theatre where t_name like 'A%';
```

#10.

```
select * from theatre
inner join actor
on theatre.aid = actor.aid and a_name='Jacob';
```



#11.

```
declare
dor_var movie.dor%TYPE;
budget_var movie.budget%TYPE;
begin
select dor, budget into dor_var, budget_var from movie where m_name='Love';
dbms_output.put_line('DATE OF RELEASE:'||dor_var);
dbms_output.put_line('BUDGET:'||budget_var);
end;
```