

THE PANDEMIC PASS-TIME



DATA MODELING PROJECT SUMMER 2020

By

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Introduction:

Cloud-based streaming services are gaining popularity among the broader customer base owing to enhanced accessibility of data. In addition, Asia Pacific and North America are the largest market for video streaming due to the rising popularity of over-the-top (OTT) solutions, increasing number of subscribers, increasing disposable income rates, increasing trend of remote mobile video streaming and increasing digitalization. Increasing technological advancements such as artificial intelligence and blockchain technology is the main driving force for this market to expand. Moreover, growing popularity of smartphones to view online video at remote locations is anticipated to push the market further.

Description:

The video entertainment world continues to evolve at an incredible pace to meet the high demands of the customers in today's digital space. For subscribers every month, hundreds of new videos, movies and TV shows are available for streaming on the various Over-the-Top media services like Netflix, Amazon Prime, Hulu etc. Keeping track of so many different streaming services can be challenging, particularly when we are interested in a variety of content. The project's goal is to create a database collection of the online video streaming services and their content using MySQL Workbench. This database covers a wide range of elements and allows users to search for any details relevant to a movie or a series, such as Genre, Ratings, Awards, Actors etc.

Scope:

The database consists of entities like STREAM, MOVIE, RATING, ARTIST, GENRE etc., The database is structured in a clear and effective way that keeping track of all the information at one place is easy for the viewer.



Requirements:

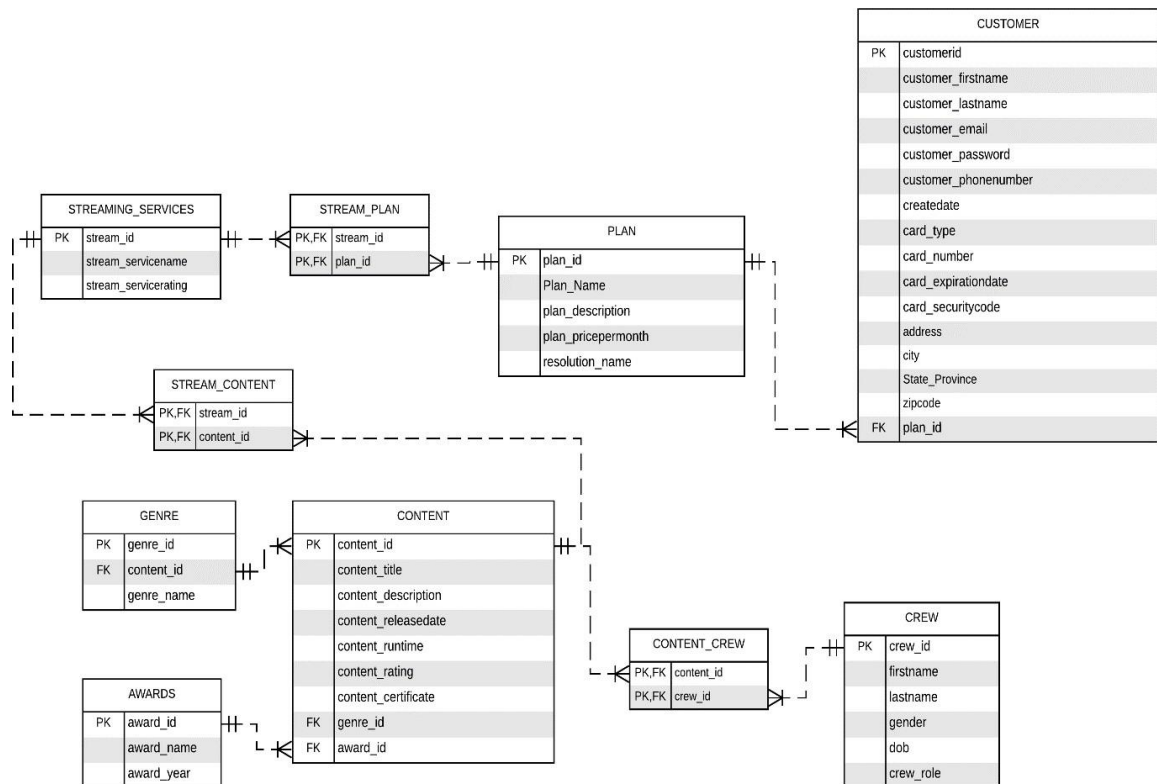
Users of this database can see any information relevant to a movie/show such as movie description, rating, runtime and other information which are attributed to a movie and genre for instance such as actors, director ,action and comedy etc., Users can also search for the top-rated movies/shows for a particular period from this database.

Business Rules:

- A customer can have one account, and one account can be owned by one customer.
- A customer can watch many streaming movies/series (Content) and a streaming movie/series (Content) can be watched by any number of customers.
- A movie/series (Content) can have many crew members, and a crew member can work in many movies/series (Content).
- A movie/series (Content) can be listed in one or more genres, and a genre can contain many movies/series (Content).
- A customer can have one plan type, but a plan type can be attributed to many customers.
- A movie/series (Content) can have any number of actors (Crew), and a actor (Crew) can be in any number of movies/series (Content).
- A movie/series (Content) can have one or more awards, and an award can be given to one or more movies/series (Content).
- A streaming service can have one or more plans, and a plan can be listed in one or more streaming service.
- A movie/series (Content) can have one-star rating, but one-star rating can be given to any number of movies/series (Content).



Entity Relationship Diagram:



Data Dictionary:

Table Name	Attribute Name	Description	Data Type	Format	Key	Reference
STREAMING_SERVICES	stream_id	Unique ID for Online Media Streaming Service	INT(1)	9	PK	
	stream_servicename	Name of Online Media Streaming Service	VARCHAR(30)	XXXXXXXX		
	stream_servicerating	Standard rating of the Online Media Streaming Service	FLOAT(1)	9.9		
STREAM_PLAN	stream_id	Unique ID for Online Media Streaming Service	INT(1)	9	PK,FK	STREAMING_SERVICES
	plan_id	Subscription Plan ID of Online Media Streaming Service	INT(3)	999	PK,FK	PLAN
STREAM_CONTENT	stream_id	Unique ID for Online Media Streaming Service	INT(1)	9	PK,FK	STREAMING_SERVICES
	content_id	Unique ID of Movie	INT(7)	9999999	PK,FK	CONTENT
CUSTOMER	customerid	Unique ID of Customer for Identification	INT(3)	999	PK	
	customer_firstname	First Name of Customer	VARCHAR(50)	XXXXXXXX		
	customer_lastname	Last Name of Customer	VARCHAR(50)	XXXXXXXX		
	customer_email	Email ID of Customer's Account	VARCHAR(50)	XXXXXXXX		
	customer_password	Password of Customer's Account	VARCHAR(15)	XXXXXXXX		
	customer_phonenumber	Phone number of Customer's Account	INT(10)	99999999		
	createdate	Date of creation of Customer's Account	DATE	DD MMM YY		
	card_type	Type of Card used for payment	VARCHAR(15)	XXXXXXXX		
	card_number	Card number used for payment	INT(16)	99999999		
	card_expirationdate	Expiry date of Card used for payment	DATE	DD MMM YY		
	card_securitycode	Security code of Card used for payment	INT(3)	999		
	address	The Address is given in this field	VARCHAR(100)	XXXXXXXX		

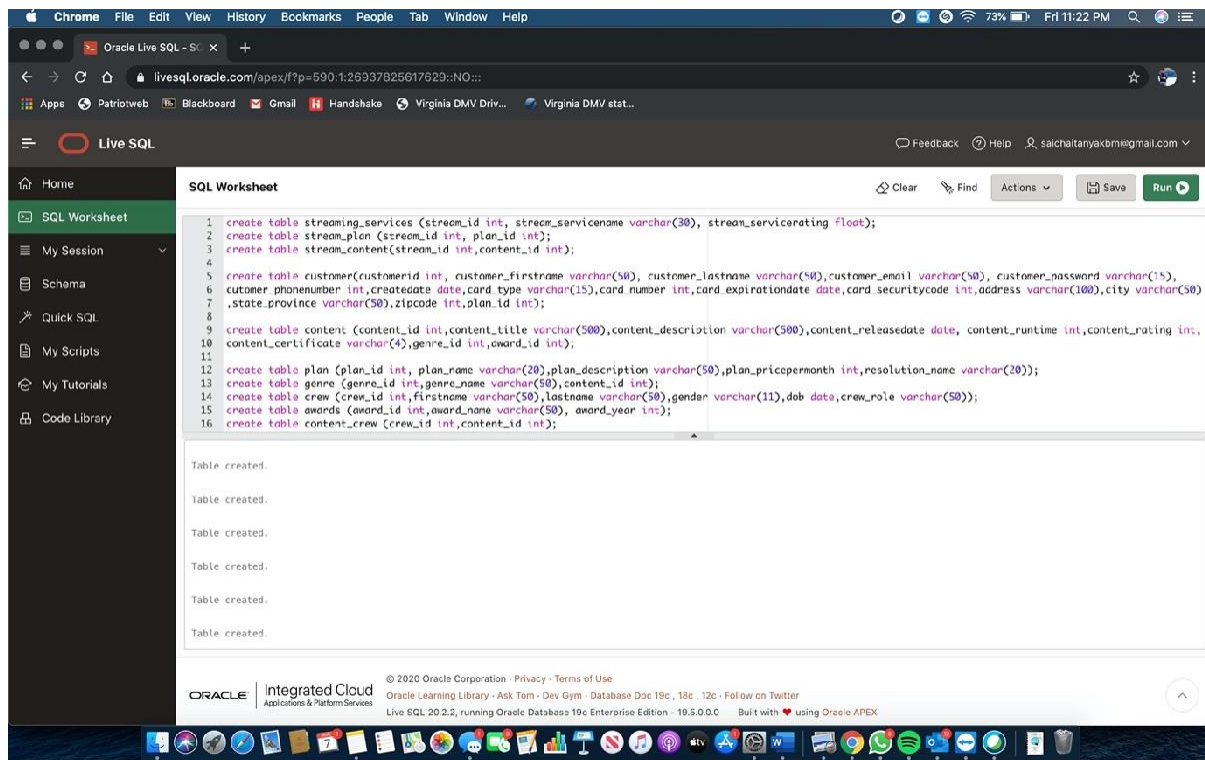
	city	Name of City of the customers Address	VARCHAR(50)	XXXXXXXX		
	State_province	Name of State of the customers Address	VARCHAR(50)	XXXXXXXX		
	zipcode	Zipcode for billing	INT(5)	99999		
	plan_id	Subscriptional Plan ID of Online Media Streaming Service	INT(3)	999	FK	PLAN
CONTENT	content_id	Unique ID of Movie	INT(7)	9999999	PK	
	content_title	Title of the Movie	VARCHAR(500)	XXXXXXXX		
	content_description	Description of the Movie	VARCHAR(500)	XXXXXXXX		
	content_releasedate	Date of The Movie Release	DATE	DD MMM YY		
	content_runtime	The Movie RunTime(Duration of The movie)	INT(3)	999		
	content_rating	Standard rating given to the Movie	INT(1)	9		
	content_certificate	Certificate given for the Movie like (A, U/A)	VARCHAR(4)	XXX		
	genre_id	Unique ID given for the Genre of the Movie	INT(6)	999999	FK	GENRE
	award_id	Unique ID given for the Award of the Movie	INT(6)	999999	FK	AWARDS
PLAN	plan_id	Subscriptional Plan ID of Online Media Streaming Service	INT(11)	99999	PK	
	plan_name	Subscriptional Plan Name of Online Media Streaming Ser	VARCHAR(20)	XXXXXXXX		
	plan_description	Description of the Subscriptional plan	VARCHAR(50)	XXXXXXXX		
	plan_pricepermonth	Price of the Subscriptional Plan Per Month	INT(5)	99999		
	resolution_name	The resolution of the movie that is available for the plan	VARCHAR(20)	XXXXXXXX		
GENRE	genre_id	For Unique identification of the Genre	INT(6)	999999	PK	
	content_id	Unique identification for movie	INT(7)	9999999	FK	CONTENT
	genre_name	Name of the Genre	VARCHAR(50)	XXXXXX		

CREW	crew_id	For Unique identification of Actor	INT(3)	999	PK	
	firstname	First name of the Actor	VARCHAR(50)	XXXXXX		
	lastname	Last name of the Actor	VARCHAR(50)	XXXXXX		
	gender	Actor's Sex	VARCHAR(11)	XXXXXX		
	dob	Actor's Date of Birth	DATE	DD MMM YY		
	crew_role	Job	VARCHAR(50)	XXXXXX		
AWARDS	award_id	For Unique Identification of Awards	INT(6)	999999	PK	
	award_name	Name of the Award	VARCHAR(50)	XXXXXX		
	award_year	Year in which award was given	INT(4)	9999		
CONTENT_CREW	crew_id	For Unique identification of Crew	INT(3)	999	PK,FK	CREW
	content_id	Unique ID of Movie	INT(7)	9999999	PK,FK	CONTENT

Table Creation:

- **Streaming_services:**
create table streaming_services (stream_id int, stream_servicename varchar(30), stream_servicerating float);
- **Stream_plan:**
create table stream_plan (stream_id int, plan_id int);
- **Stream_content:**
create table stream_content(stream_id int,content_id int);
- **Customer:**
create table customer(customerid int, customer_firstname varchar(50), customer_lastname varchar(50),customer_email varchar(50), customer_password varchar(15),cutomer_phonenumber int,createdate date,card_type varchar(15),card_number int,card_expirationdate date,card_securitycode int,address varchar(100),city varchar(50),state_province varchar(50),zipcode int,plan_id int);
- **Content:**
create table content (content_id int,content_title varchar(500),content_description varchar(500),content_releasedate date, content_runtime int,content_rating int,content_certificate varchar(4),genre_id int,award_id int);
- **Plan:**
create table plan (plan_id int, plan_name varchar(20),plan_description varchar(50),plan_pricepermonth int,resolution_name varchar(20));
- **Genre:**

- create table genre (genre_id int,genre_name varchar(50),content_id int);
- **Crew:**
create table crew (crew_id int,firstname varchar(50),lastname varchar(50),gender varchar(11),dob date,crew_role varchar(50));
- **Awards:**
create table awards (award_id int,award_name varchar(50), award_year int);
- **Content_crew:**
create table content_crew (crew_id int,content_id int);



Inserting data into the tables:

streaming_services

insert all

into streaming_services (stream_id , stream_servicename, stream_servicerating) values ('1','Netflix','4.4')

into streaming_services (stream_id , stream_servicename, stream_servicerating) values ('2','Amazon prime video','4.1')

into streaming_services (stream_id , stream_servicename, stream_servicerating) values ('3','Hulu','3.9')

select * from dual;

select * from streaming_services order by stream_id asc;

STREAM_ID	STREAM_SERVICENAME	STREAM_SERVICERATING
1	Netflix	4.4
2	Amazon prime video	4.1
3	Hulu	3.9

Download CSV

3 rows selected.

Oracle Live SQL - SQL Worksheet

```

1 insert all
2 into streaming_services (stream_id , stream_servicename, stream_servicerating ) values ('1','Netflix','4.4')
3 into streaming_services (stream_id , stream_servicename, stream_servicerating ) values ('2','Amazon prime video','4.1')
4 into streaming_services (stream_id , stream_servicename, stream_servicerating ) values ('3','Hulu','3.9')
5 select * from dual;
6 select * from streaming_services order by stream_id asc;

```

3 row(s) inserted.

STREAM_ID	STREAM_SERVICENAME	STREAM_SERVICERATING
1	Netflix	4.4
2	Amazon prime video	4.1
3	Hulu	3.9

Download CSV
3 rows selected.

stream_plan

insert into stream_plan (stream_id , plan_id) values ('1','101');

insert into stream_plan (stream_id , plan_id) values ('2','102');

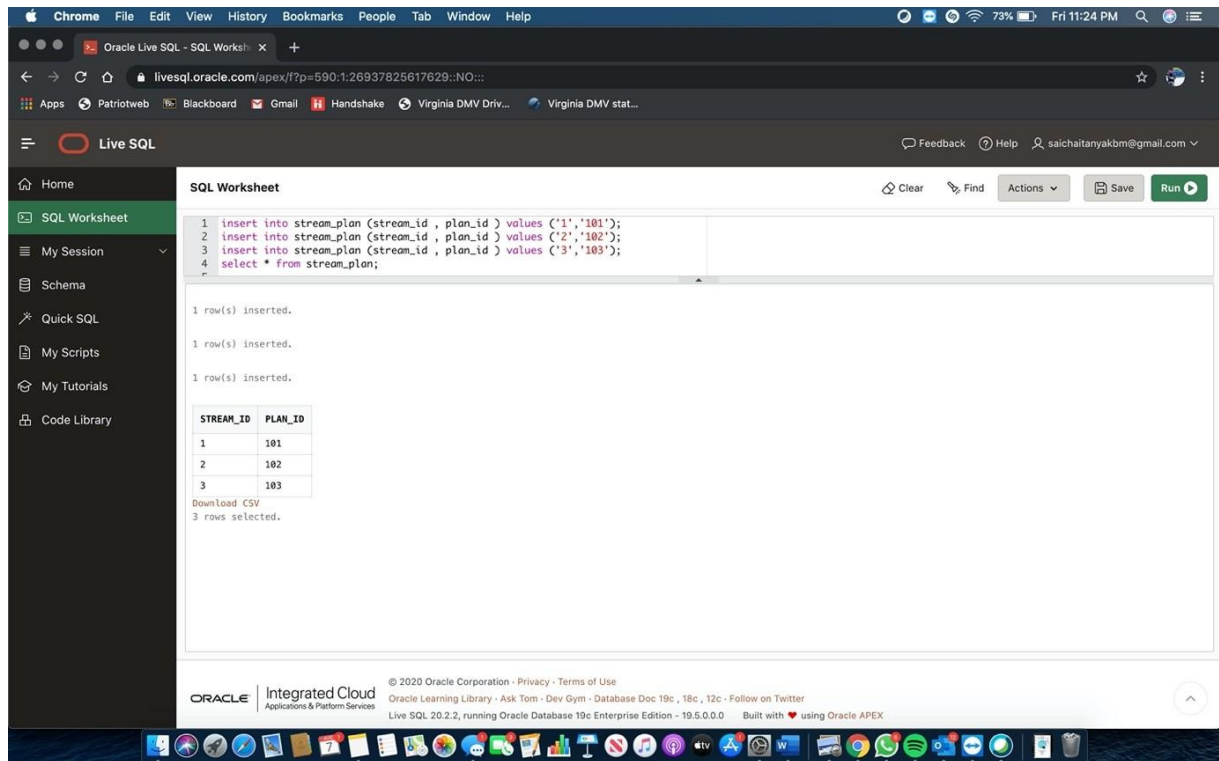
insert into stream_plan (stream_id , plan_id) values ('3','103');

select * from stream_plan;

STREAM_ID	PLAN_ID
1	101
2	102
3	103

Download CSV

3 rows selected.



stream_content

insert all

```

into stream_content (stream_id,content_id) values ('1','5601001')
into stream_content (stream_id,content_id) values ('2','5601002')
into stream_content (stream_id,content_id) values ('3','5601003')
into stream_content (stream_id,content_id) values ('2','5601004')
into stream_content (stream_id,content_id) values ('1','5601005')
into stream_content (stream_id,content_id) values ('1','5601006')
into stream_content (stream_id,content_id) values ('3','5601007')
into stream_content (stream_id,content_id) values ('2','5601008')
into stream_content (stream_id,content_id) values ('3','5601009')
into stream_content (stream_id,content_id) values ('1','5601010')
select * from dual;

```

select * from stream_content;

STREAM_ID	CONTENT_ID
1	5601001
2	5601002
3	5601003
2	5601004
1	5601005
1	5601006
3	5601007
2	5601008
3	5601009
1	5601010

Download CSV

10 rows selected.

customer

insert all

into customer (customerid, customer_firstname, customer_lastname, customer_email, customer_password, customer_phonenumber, createdate, card_type, card_number, card_expirationdate, card_securitycode, address, city, state_province, zipcode, plan_id) values ('301', 'Eugene', 'christ', 'Eugene@gmail.com', '*****', '5716978469', '01-OCT-15', 'debit', '1234567890123456', '11-JAN-22', '123', '28 Campfire St.', 'North Augusta', 'SC', '29841', '101')

into customer (customerid, customer_firstname, customer_lastname, customer_email, customer_password, customer_phonenumber, createdate, card_type, card_number, card_expirationdate, card_securitycode, address, city, state_province, zipcode, plan_id) values ('302', 'Jacob', 'smith', 'Jacob@gmail.com', '*****', '5726513452', '10-MAR-15', 'credit', '2673949283912674', '10-MAR-23', '652', '9278 Beach St.', 'Hanover', 'PA', '17331', '103')

into customer (customerid, customer_firstname, customer_lastname, customer_email, customer_password, customer_phonenumber, createdate, card_type, card_number, card_expirationdate, card_securitycode, address, city, state_province, zipcode, plan_id) values ('303', 'Rafael', 'john', 'Rafael@gmail.com', '*****', '8735142563', '10-MAR-16', 'debit', '2784656286473521', '10-MAY-25', '761', '83 High Noon St.', 'Yuma', 'AZ', '85365', '102')

into customer (customerid, customer_firstname, customer_lastname, customer_email, customer_password, customer_phonenumber, createdate, card_type, card_number, card_expirationdate, card_securitycode, address, city, state_province, zipcode, plan_id) values ('304', 'Ben', 'dime', 'Ben@gmail.com', '*****', '5716283746', '13-APR-13', 'credit', '8925637183562173', '23-JUN-21', '637', '31 Inverness St.', 'Grovetown', 'GA', '30813', '102')

into customer (customerid, customer_firstname, customer_lastname, customer_email, customer_password, customer_phonenumber, createdate, card_type, card_number, card_expirationdate, card_securitycode, address, city, state_province, zipcode, plan_id) values ('305', 'Abdullah', 'shaik', 'Abdullah@gmail.com', '*****', '5716359840', '31-DEC-18', 'credit', '7892027839927993', '10-JAN-23', '925', '938 Marlborough Street', 'Hempstead', 'NY', '11550', '103')

```

into customer (customerid, customer_firstname, customer_lastname, customer_email,
customer_password,cutomer_phonenumber,createdate,card_type,card_number,card_expirationda
te,card_securitycode,address,city,state_province,zipcode,plan_id) values
('306','John','Nicolas','johnic@gmail.com','*****','5587368885','03-JUL-
16','debit','4391234578674435','01-NOV-23','155','18 Fry St.','Denton','TX','76201','101')
into customer (customerid, customer_firstname, customer_lastname, customer_email,
customer_password,cutomer_phonenumber,createdate,card_type,card_number,card_expirationda
te,card_securitycode,address,city,state_province,zipcode,plan_id) values
('307','Teresa','Olivarez','teroli@gmail.com','*****','2316478966','06-MAY-
15','debit','2231445644738897','13-JAN-22','888','22 Colorado St.','Irving','VA','76403','103')
into customer (customerid, customer_firstname, customer_lastname, customer_email,
customer_password,cutomer_phonenumber,createdate,card_type,card_number,card_expirationda
te,card_securitycode,address,city,state_province,zipcode,plan_id) values
('308','Jenna','Ledford','jenled@gmail.com','*****','9406596675','20-DEC-
14','credit','9122546623890065','14-OCT-21','166','2 Avenue St.','Plano','DC','56793','102')
into customer (customerid, customer_firstname, customer_lastname, customer_email,
customer_password,cutomer_phonenumber,createdate,card_type,card_number,card_expirationda
te,card_securitycode,address,city,state_province,zipcode,plan_id) values
('309','Rachelle','Lambart','rachlam@gmail.com','*****','2813457765','04-FEB-
13','debit','3155980754673345','01-DEC-21','966','7 Oak St.','Frisco','TS','89647','102')
into customer (customerid, customer_firstname, customer_lastname, customer_email,
customer_password,cutomer_phonenumber,createdate,card_type,card_number,card_expirationda
te,card_securitycode,address,city,state_province,zipcode,plan_id) values
('310','Jaya','Gullapalli','jayagu@gmail.com','*****','5748978469','01-NOV-
16','credit','6754998756432210','10-MAY-23','866','31 Boulevard St.','Lewisville','CA','35672','101')
select * from dual;
select * from customer;

```

10 row(s) inserted.

CUSTOMERID	CUSTOMER_FIRSTNAME	CUSTOMER_LASTNAME	CUSTOMER_EMAIL	CUSTOMER_PASSWORD	CUTOMER_PHONENUMBER	CREATEDATE	CARD_TYPE	CARD_NUMBER	CARD_EXPIRATIONDATE	CA
301	Eugene	christ	Eugene@gmail.com	*****	5716978469	01-OCT-15	debit	1234567890123456	11-JAN-22	12
302	Jacob	smith	Jacob@gmail.com	*****	5726513452	10-MAR-15	credit	2673949283912674	10-MAR-23	65
303	Rafael	john	Rafael@gmail.com	*****	8735142563	10-MAR-16	debit	2784656286473521	10-MAY-25	76
304	Ben	dime	Ben@gmail.com	*****	5716283746	13-APR-13	credit	8925637183562173	23-JUN-21	63
305	Abdullah	shaik	Abdullah@gmail.com	*****	5716359840	31-DEC-18	credit	7892027839927993	10-JAN-23	92
306	John	Nicolas	johnic@gmail.com	*****	5587368885	03-JUL-16	debit	4391234578674435	01-NOV-23	15
307	Teresa	Olivarez	teroli@gmail.com	*****	2316478966	06-MAY-15	debit	2231445644738897	13-JAN-22	88
308	Jenna	Ledford	jenled@gmail.com	*****	9406596675	20-DEC-14	credit	9122546623890065	14-OCT-21	16
309	Rachelle	Lambart	rachlam@gmail.com	*****	2813457765	04-FEB-13	debit	3155980754673345	01-DEC-21	96
310	Jaya	Gullapalli	jayagu@gmail.com	*****	5748978469	01-NOV-16	credit	6754998756432210	10-MAY-23	86

Download CSV

10 rows selected.

CARD_SECURITYCODE	ADDRESS	CITY	STATE_PROVINCE	ZIPCODE	PLAN_ID
123	28 Campfire St.	North Augusta	SC	29841	101
652	9278 Beach St.	Hanover	PA	17331	103
761	83 High Noon St.	Yuma	AZ	85365	102
637	31 Inverness St.	Grovetown	GA	30813	102
925	938 Marlborough Street	Hempstead	NY	11550	103
155	18 Fry St.	Denton	TX	76201	101
888	22 Colorado St.	Irving	VA	76403	103
166	2 Avenue St.	Plano	DC	56793	102
966	7 Oak St.	Frisco	TS	89647	102
866	31 Boulevard St.	Lewisville	CA	35672	101



The screenshot shows the Oracle Live SQL interface in a Chrome browser. The URL is `livesql.oracle.com/apex/?p=590:1:26937825617629::NO::`. The interface includes a sidebar with navigation options like Home, SQL Worksheet, My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled 'SQL Worksheet' and contains a script with 14 lines of SQL code. Lines 1-12 are 'insert all' statements for the 'content' table. Lines 13-14 are 'select * from dual;' and 'select * from content;'. Below the script is a table with 10 columns: CUSTOMERID, CUSTOMER_FIRSTNAME, CUSTOMER_LASTNAME, CUSTOMER_EMAIL, CUSTOMER_PASSWORD, CUSTOMER_PHONENUMBER, CREATEDATE, CARD_TYPE, CARD_NUMBER, and CARD_EXPIRATIONDATE. The table contains 6 rows of data for customers 301 through 306.

CUSTOMERID	CUSTOMER_FIRSTNAME	CUSTOMER_LASTNAME	CUSTOMER_EMAIL	CUSTOMER_PASSWORD	CUSTOMER_PHONENUMBER	CREATEDATE	CARD_TYPE	CARD_NUMBER	CARD_EXPIRATIONDATE	CARD_NUMBER
301	Eugene	christ	Eugene@gmail.com	*****	5716978469	01-OCT-15	debit	1234567890123456	11-JAN-22	12
302	Jacob	smith	Jacob@gmail.com	*****	5726513452	10-MAR-15	credit	2673949283912674	10-MAY-23	65
303	Rafael	john	Rafael@gmail.com	*****	8735142563	10-MAR-16	debit	2784656286473521	10-MAY-25	76
304	Ben	dime	Ben@gmail.com	*****	5716283746	13-APR-13	credit	8925637183562173	23-JUN-21	63
305	Abdullah	shaik	Abdullah@gmail.com	*****	5716359840	31-DEC-18	credit	7892027839927993	10-JAN-23	92
306	John	Nicolas	johnic@gmail.com	*****	5587368885	03-JUL-16	debit	4391234578674435	01-NOV-23	15

Content

insert all

into content (content_id, content_title, content_description, content_releasedate, content_runtime, content_rating, content_certificate, genre_id, award_id) values ('5601001', 'Guardians of the Galaxy', 'A group of intergalactic criminals are forced to work together to stop a fanatical warrior from taking control of the universe', '01-Aug-14', '125', '8', '12 A', '113012', '928014')

into content (content_id, content_title, content_description, content_releasedate, content_runtime, content_rating, content_certificate, genre_id, award_id) values ('5601002', 'Prometheus', 'Following clues to the origin of mankind, a team finds a structure on a distant moon, but they soon realize they are not alone.', '08-Jun-12', '124', '7', '12 A', '113012', '928015')

into content (content_id, content_title, content_description, content_releasedate, content_runtime, content_rating, content_certificate, genre_id, award_id) values ('5601003', 'Split', 'Three girls are kidnapped by a man with a diagnosed 23 distinct personalities. They must try to escape before the apparent emergence of a frightful new 24th.', '19-Jan-17', '117', '7', '15', '113003', '928006')

into content (content_id, content_title, content_description, content_releasedate, content_runtime, content_rating, content_certificate, genre_id, award_id) values ('5601004', 'Sing', 'In a city of humanoid animals, a hustling theater impresarios attempt to save his theater with a singing competition becomes grander than he anticipates even as its finalists find that their lives will never be the same.', '21-Dec-16', '114', '7', '12 A', '113010', '928004')

into content (content_id, content_title, content_description, content_releasedate, content_runtime, content_rating, content_certificate, genre_id, award_id) values ('5601005', 'Suicide Squad', 'A secret government agency recruits some of the most dangerous incarcerated super-villains to form a defensive task force. Their first mission: save the world from the apocalypse.', '5-Aug-16', '137', '6', '15', '113001', '928006')

Select * from dual;

Select * from content;



5 row(s) inserted.

CONTENT_ID	CONTENT_TITLE	CONTENT_DESCRIPTION	CONTENT_RELEASEDATE	CONTENT_RUNTIME	CONTENT_RATING	CONTENT_CERTIFICATE	GENRE_ID	AWARD_ID
5601001	Guardians of the Galaxy	A group of intergalactic criminals are forced to work together to stop a fanatical warrior from taking control of the universe	01-AUG-14	125	8	12 A	113012	928014
5601002	Prometheus	Following clues to the origin of mankind, a team finds a structure on a distant moon, but they soon realize they are not alone.	08-JUN-12	124	7	12 A	113012	928015
5601003	Split	Three girls are kidnapped by a man with a diagnosed 23 distinct personalities. They must try to escape before the apparent emergence of a frightful new 24th.	19-JAN-17	117	7	15	113003	928006
5601004	Sing	In a city of humanoid animals, a hustling theater impresarios attempt to save his theater with a singing competition becomes grander than he anticipates even as its finalists find that their lives will never be the same.	21-DEC-16	114	7	12 A	113010	928004
5601005	Suicide Squad	A secret government agency recruits some of the most dangerous incarcerated super-villains to form a defensive task force. Their first mission: save the world from the apocalypse.	05-AUG-16	137	6	15	113001	928006

Download CSV
5 rows selected.

The screenshot shows the Oracle Live SQL interface. The SQL worksheet contains the following SQL code:

```

1 insert all
2 into content (content_id, content_title, content_description, content_releasedate, content_runtime, content_rating, content_certificate, genre_id, award_id)
3 values ('5601001', 'Guardians of the Galaxy', 'A group of intergalactic criminals are forced to work together to stop a fanatical warrior from taking control of the universe', '01-AUG-14', 125, 8, '12 A', 113012, 928014)
4 into content (content_id, content_title, content_description, content_releasedate, content_runtime, content_rating, content_certificate, genre_id, award_id) values ('5601002', 'Prometheus', 'Following clues to the origin of mankind, a team finds a structure on a distant moon, but they soon realize they are not alone.', '08-JUN-12', 124, 7, '12 A', 113012, 928015)
5 into content (content_id, content_title, content_description, content_releasedate, content_runtime, content_rating, content_certificate, genre_id, award_id) values ('5601003', 'Split', 'Three girls are kidnapped by a man with a diagnosed 23 distinct personalities. They must try to escape before the apparent emergence of a frightful new 24th.', '19-JAN-17', 117, 7, '15', 113003, 928006)
6 into content (content_id, content_title, content_description, content_releasedate, content_runtime, content_rating, content_certificate, genre_id, award_id) values ('5601004', 'Sing', 'In a city of humanoid animals, a hustling theater impresarios attempt to save his theater with a singing competition becomes grander than he anticipates even as its finalists find that their lives will never be the same.', '21-DEC-16', 114, 7, '12 A', 113010, 928004)
7 into content (content_id, content_title, content_description, content_releasedate, content_runtime, content_rating, content_certificate, genre_id, award_id) values ('5601005', 'Suicide Squad', 'A secret government agency recruits some of the most dangerous incarcerated super-villains to form a defensive task force. Their first mission: save the world from the apocalypse.', '05-AUG-16', 137, 6, '15', 113001, 928006)
8 select * from dual;
9 select * from content;

```

The resulting table is displayed below the SQL code:

CONTENT_ID	CONTENT_TITLE	CONTENT_DESCRIPTION	CONTENT_RELEASEDATE	CONTENT_RUNTIME	CONTENT_RATING	CONTENT_CERTIFICATE	GENRE_ID	AWARD_ID
5601001	Guardians of the Galaxy	A group of intergalactic criminals are forced to work together to stop a fanatical warrior from taking control of the universe	01-AUG-14	125	8	12 A	113012	928014
5601002	Prometheus	Following clues to the origin of mankind, a team finds a structure on a distant moon, but they soon realize they are not alone.	08-JUN-12	124	7	12 A	113012	928015
5601003	Split	Three girls are kidnapped by a man with a diagnosed 23 distinct personalities. They must try to escape before the apparent emergence of a frightful new 24th.	19-JAN-17	117	7	15	113003	928006
5601004	Sing	In a city of humanoid animals, a hustling theater impresarios attempt to save his theater with a singing competition becomes grander than he anticipates even as its finalists find that their lives will never be the same.	21-DEC-16	114	7	12 A	113010	928004
5601005	Suicide Squad	A secret government agency recruits some of the most dangerous incarcerated super-villains to form a defensive task force. Their first mission: save the world from the apocalypse.	05-AUG-16	137	6	15	113001	928006

plan

insert all

insert all

into plan (plan_id, plan_name, plan_description, plan_pricepermonth, resolution_name) values ('101', 'Basic', 'Number of screens at once is 1', '9', 'SD')

into plan (plan_id, plan_name, plan_description, plan_pricepermonth, resolution_name) values ('102', 'Standard', 'Number of screens at once is 2', '13', 'HD')

into plan (plan_id, plan_name, plan_description, plan_pricepermonth, resolution_name) values ('103', 'Premium', 'Number of screens at once is 4', '16', 'HD + Ultra HD')

select * from dual;

select * from plan;

PLAN_ID	PLAN_NAME	PLAN_DESCRIPTION	PLAN_PRICEPERMONTH	RESOLUTION_NAME
101	Basic	Number of screens at once is 1	9	SD
102	Standard	Number of screens at once is 2	13	HD
103	Premium	Number of screens at once is 4	16	HD + Ultra HD

Download CSV
3 rows selected.



The screenshot shows the Oracle Live SQL web interface. The SQL Worksheet contains the following code:

```

1 insert all
2 into plan (plan_id, plan_name, plan_description, plan_pricepermonth, resolution_name) values ('101', 'Basic', 'Number of screens at once is 1', '9', 'SD')
3 into plan (plan_id, plan_name, plan_description, plan_pricepermonth, resolution_name) values ('102', 'Standard', 'Number of screens at once is 2', '13', 'HD')
4 into plan (plan_id, plan_name, plan_description, plan_pricepermonth, resolution_name) values ('103', 'Premium', 'Number of screens at once is 4', '16', 'HD + Ultra
5 select * from dual;
6 select * from plan;

```

The execution result shows "3 row(s) inserted." and a table with the following data:

PLAN_ID	PLAN_NAME	PLAN_DESCRIPTION	PLAN_PRICEPERMONTH	RESOLUTION_NAME
101	Basic	Number of screens at once is 1	9	SD
102	Standard	Number of screens at once is 2	13	HD
103	Premium	Number of screens at once is 4	16	HD + Ultra HD

Below the table, it says "Download CSV" and "3 rows selected."

Genre

insert all

```

into genre (genre_id, genre_name, content_id) values (113001, 'Action', 5601001)
into genre (genre_id, genre_name, content_id) values (113002, 'Drama', 5601002)
into genre (genre_id, genre_name, content_id) values (113003, 'Horror', 5601003)
into genre (genre_id, genre_name, content_id) values (113004, 'Adventure', 5601004)
into genre (genre_id, genre_name, content_id) values (113005, 'Fantasy', 5601005)
into genre (genre_id, genre_name, content_id) values (113006, 'Romance', 5601006)
into genre (genre_id, genre_name, content_id) values (113007, 'Thriller', 5601007)
into genre (genre_id, genre_name, content_id) values (113008, 'Crime film', 5601008)
into genre (genre_id, genre_name, content_id) values (113009, 'Mystery', 5601009)
into genre (genre_id, genre_name, content_id) values (113010, 'Romantic Comedy', 5601010)
into genre (genre_id, genre_name, content_id) values (113011, 'Animation', 5601011)
into genre (genre_id, genre_name, content_id) values (113012, 'Science Fiction', 5601012)
into genre (genre_id, genre_name, content_id) values (113013, 'Documentary', 5601013)
into genre (genre_id, genre_name, content_id) values (113014, 'Biographical', 5601014)
into genre (genre_id, genre_name, content_id) values (113015, 'Comedy', 5601015)
into genre (genre_id, genre_name, content_id) values (113016, 'Zombie', 5601016)
select * from dual;
select * from genre;

```

16 row(s) inserted.

GENRE_ID	GENRE_NAME	CONTENT_ID
113001	Action	5601001
113002	Drama	5601002
113003	Horror	5601003
113004	Adventure	5601004
113005	Fantasy	5601005
113006	Romance	5601006
113007	Thriller	5601007
113008	Crime film	5601008
113009	Mystery	5601009
113010	Romantic Comedy	5601010
113011	Animation	5601011
113012	Science Fiction	5601012
113013	Documentary	5601013
113014	Biographical	5601014
113015	Comedy	5601015
113016	Zombie	5601016

[Download CSV](#)

16 rows selected.

The screenshot shows the Oracle Live SQL web interface. The browser address bar displays the URL: `livesql.oracle.com/apex/?p=590:1:26937825617629::NO::`. The interface includes a sidebar with navigation options like Home, SQL Worksheet, My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet" and contains a SQL script with 19 lines. Lines 2-17 are `INSERT` statements for the `genre` table, and lines 18-19 are `SELECT` statements. Below the script, a table view displays the first 7 rows of the `genre` table, showing columns `GENRE_ID`, `GENRE_NAME`, and `CONTENT_ID`. The footer of the interface includes Oracle branding, copyright information for 2020, and links to privacy and terms of use.

Crew

insert all

into crew (crew_id,firstname ,lastname ,gender, dob, crew_role) values ('10001', 'Lilia', 'Adam', 'F', '12-Jan-96', 'Actor')

into crew (crew_id,firstname ,lastname ,gender, dob, crew_role) values ('10002', 'Rafael', 'Hoover', 'F', '22-Jan-90', 'Actor')

into crew (crew_id,firstname ,lastname ,gender, dob, crew_role) values ('10003', 'Anderson', 'Ayers', 'M', '22-Mar-99', 'Director')


```

into crew (crew_id,firstname,lastname,gender,dob,crew_role) values ('10004','Remi','Watt','M',
'14-Dec-89','Cinematographer')
into crew (crew_id,firstname,lastname,gender,dob,crew_role) values ('10005','Soren','Valdez',
'M','09-Apr-62','Music Director')
into crew (crew_id,firstname,lastname,gender,dob,crew_role) values ('10006','Brent','Kaur','F',
'11-Oct-79','Camera Man')
select * from dual;
select * from crew;
6 row(s) inserted.

```

CREW_ID	FIRSTNAME	LASTNAME	GENDER	DOB	CREW_ROLE
10001	Lilia	Adam	F	12-JAN-96	Actor
10002	Rafael	Hoover	F	22-JAN-90	Actor
10003	Anderson	Ayers	M	22-MAR-99	Director
10004	Remi	Watt	M	14-DEC-89	Cinematographer
10005	Soren	Valdez	M	09-APR-62	Music Director
10006	Brent	Kaur	F	11-OCT-79	Camera Man

Download CSV

6 rows selected.

The screenshot shows the Oracle Live SQL interface. The SQL Worksheet contains the following queries:

```

1 insert all
2 into crew (crew_id,firstname,lastname,gender,dob,crew_role) values ('10001','Lilia','Adam','F','12-Jan-96','Actor')
3 into crew (crew_id,firstname,lastname,gender,dob,crew_role) values ('10002','Rafael','Hoover','F','22-Jan-90','Actor')
4 into crew (crew_id,firstname,lastname,gender,dob,crew_role) values ('10003','Anderson','Ayers','M','22-Mar-99','Director')
5 into crew (crew_id,firstname,lastname,gender,dob,crew_role) values ('10004','Remi','Watt','M','14-Dec-89','Cinematographer')
6 into crew (crew_id,firstname,lastname,gender,dob,crew_role) values ('10005','Soren','Valdez','M','09-Apr-62','Music Director')
7 into crew (crew_id,firstname,lastname,gender,dob,crew_role) values ('10006','Brent','Kaur','F','11-Oct-79','Camera Man')
8 select * from dual;
9 select * from crew;

```

Below the queries, it shows "6 row(s) inserted." and a table with the following data:

CREW_ID	FIRSTNAME	LASTNAME	GENDER	DOB	CREW_ROLE
10001	Lilia	Adam	F	12-JAN-96	Actor
10002	Rafael	Hoover	F	22-JAN-90	Actor
10003	Anderson	Ayers	M	22-MAR-99	Director
10004	Remi	Watt	M	14-DEC-89	Cinematographer
10005	Soren	Valdez	M	09-APR-62	Music Director
10006	Brent	Kaur	F	11-OCT-79	Camera Man

At the bottom, it says "Download CSV" and "6 rows selected."

Awards

insert all

```

into awards (award_id,award_name,award_year) values ('928001','Best Actor','1989')
into awards (award_id,award_name,award_year) values ('928002','Best Actress','2000')
into awards (award_id,award_name,award_year) values ('928003','Best Adapted
Screenplay','1988')
into awards (award_id,award_name,award_year) values ('928004','Best Original
Screenplay','2002')
into awards (award_id,award_name,award_year) values ('928005','Best Animated Feature
Film','2005')

```

```

into awards (award_id,award_name , award_year) values ('928006','Best Cinematography','2001')
into awards (award_id,award_name , award_year) values ('928007','Best Costume Design','2010')
into awards (award_id,award_name , award_year) values ('928008','Best Director','2007')
into awards (award_id,award_name , award_year) values ('928009','Best Film Editing','2015')
into awards (award_id,award_name , award_year) values ('928010','Best Production Design','2017')
into awards (award_id,award_name , award_year) values ('928011','Best Original Score','2009')
into awards (award_id,award_name , award_year) values ('928012','Best OriginalSong','2019')
into awards (award_id,award_name , award_year) values ('928013','Best Sound','1990')
into awards (award_id,award_name , award_year) values ('928014','Best Special Effects','1995')
into awards (award_id,award_name , award_year) values ('928015','Best Supporting Actor','2003')
into awards (award_id,award_name , award_year) values ('928016','Best Supporting Actress','2019')
select * from dual;
select * from awards;

```

AWARD_ID	AWARD_NAME	AWARD_YEAR
928001	Best Actor	1989
928002	Best Actress	2000
928003	Best Adapted Screenplay	1988
928004	Best Original Screenplay	2002
928005	Best Animated Feature Film	2005
928006	Best Cinematography	2001
928007	Best Costume Design	2010
928008	Best Director	2007
928009	Best Film Editing	2015
928010	Best Production Design	2017
928011	Best Original Score	2009
928012	Best Original Song	2019
928013	Best Sound	1990
928014	Best Special Effects	1995
928015	Best Supporting Actor	2003
928016	Best Supporting Actress	2019

Download CSV

16 rows selected.

The screenshot shows the Oracle Live SQL interface. The SQL Worksheet contains the following code:

```

1 insert all
2 into awards (award_id,award_name , award_year) values ('928001','Best Actor', '1989')
3 into awards (award_id,award_name , award_year) values ('928002','Best Actress','2000')
4 into awards (award_id,award_name , award_year) values ('928003','Best Adapted Screenplay','1988')
5 into awards (award_id,award_name , award_year) values ('928004','Best Original Screenplay','2002')
6 into awards (award_id,award_name , award_year) values ('928005','Best Animated Feature Film','2005')
7 into awards (award_id,award_name , award_year) values ('928006','Best Cinematography','2001')
8 into awards (award_id,award_name , award_year) values ('928007','Best Costume Design','2010')
9 into awards (award_id,award_name , award_year) values ('928008','Best Director','2007')
10 into awards (award_id,award_name , award_year) values ('928009','Best Film Editing','2015')
11 into awards (award_id,award_name , award_year) values ('928010','Best Production Design','2017')
12 into awards (award_id,award_name , award_year) values ('928011','Best Original Score','2009')
13 into awards (award_id,award_name , award_year) values ('928012','Best Original Song','2019')
14 into awards (award_id,award_name , award_year) values ('928013','Best Sound','1990')
15 into awards (award_id,award_name , award_year) values ('928014','Best Special Effects','1995')
16 into awards (award_id,award_name , award_year) values ('928015','Best Supporting Actor','2003')
17 into awards (award_id,award_name , award_year) values ('928016','Best Supporting Actress','2019')
18 select * from dual;
19 select * from awards;

```

Below the code, the results of the 'select * from awards;' query are displayed in a table:

AWARD_ID	AWARD_NAME	AWARD_YEAR
928001	Best Actor	1989
928002	Best Actress	2000
928003	Best Adapted Screenplay	1988
928004	Best Original Screenplay	2002
928005	Best Animated Feature Film	2005
928006	Best Cinematography	2001
928007	Best Costume Design	2010

content_crew

insert all

```
into content_crew (crew_id,content_id) values ('10001','5601001')
into content_crew (crew_id,content_id) values ('10002','5601002')
into content_crew (crew_id,content_id) values ('10003','5601003')
into content_crew (crew_id,content_id) values ('10004','5601004')
into content_crew (crew_id,content_id) values ('10005','5601005')
into content_crew (crew_id,content_id) values ('10006','5601006')
into content_crew (crew_id,content_id) values ('10001','5601007')
into content_crew (crew_id,content_id) values ('10003','5601008')
into content_crew (crew_id,content_id) values ('10004','5601009')
into content_crew (crew_id,content_id) values ('10006','5601010')
```

select * from dual;

select * from content_crew;

CREW_ID	CONTENT_ID
501201	5601001
501202	5601002
501203	5601003
501204	5601004
501205	5601005
501206	5601006
501207	5601007
501208	5601008
501209	5601009
501210	5601010

Download CSV

10 rows selected.

The screenshot shows the Oracle Live SQL - SQL Worksheet interface. The SQL Worksheet area contains the following SQL commands:

```
1 insert all
2 into content_crew (crew_id,content_id) values ('10001','5601001')
3 into content_crew (crew_id,content_id) values ('10002','5601002')
4 into content_crew (crew_id,content_id) values ('10003','5601003')
5 into content_crew (crew_id,content_id) values ('10004','5601004')
6 into content_crew (crew_id,content_id) values ('10005','5601005')
7 into content_crew (crew_id,content_id) values ('10006','5601006')
8 into content_crew (crew_id,content_id) values ('10001','5601007')
9 into content_crew (crew_id,content_id) values ('10003','5601008')
10 into content_crew (crew_id,content_id) values ('10004','5601009')
11 into content_crew (crew_id,content_id) values ('10006','5601010')
12 select * from dual;
13 select * from content_crew;
```

The results area displays a table with the following data:

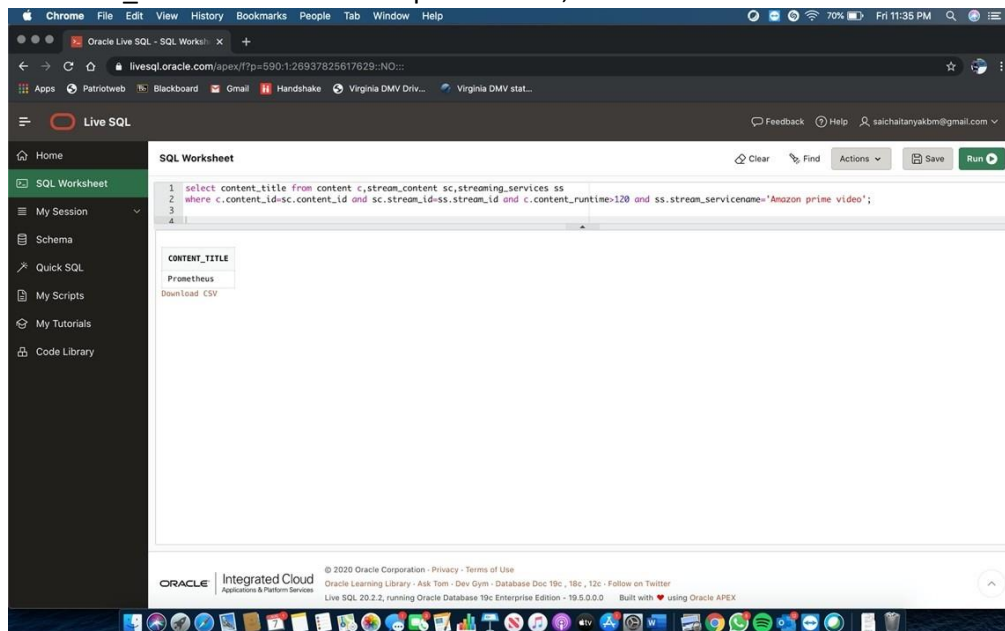
CREW_ID	CONTENT_ID
10001	5601001
10002	5601002
10003	5601003
10004	5601004
10005	5601005
10006	5601006
10001	5601007
10003	5601008
10004	5601009
10006	5601010

The interface also includes a sidebar with navigation options like Home, SQL Worksheet, My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The bottom of the screen shows the Oracle logo and copyright information.

Accessing the tables:

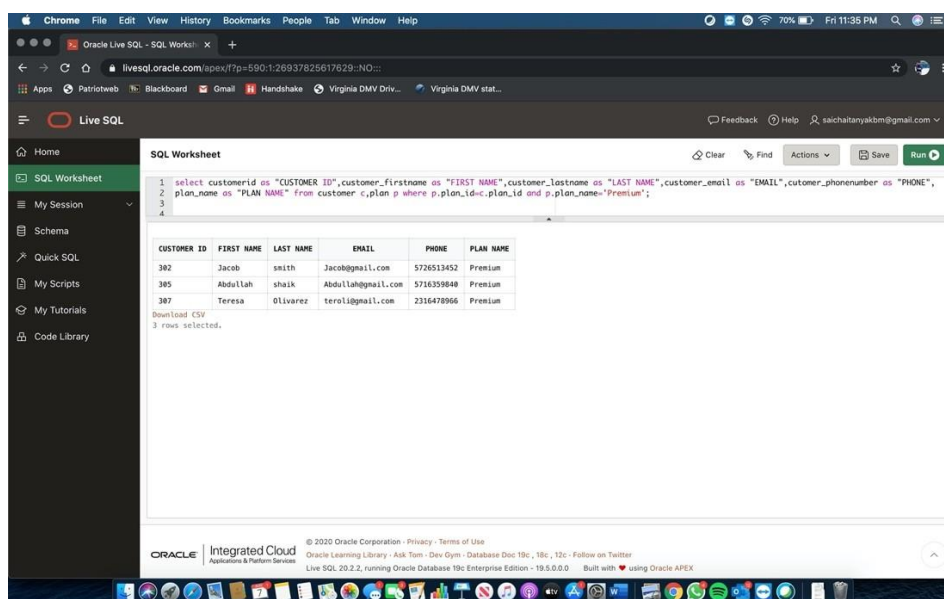
1. The below query displays the titles of the movies with runtime greater than 2 hours streaming on Amazon Prime Video.

select content_title from content c,stream_content sc,streaming_services ss where c.content_id=sc.content_id and sc.stream_id=ss.stream_id and c.content_runtime>120 and ss.stream_servicename='Amazon prime video';



2. The below query displays the customers details such as ID, First name, Last name, Email and Phone number, who own a premium plan in any of the streaming services.

select customerid as "CUSTOMER ID",customer_firstname as "FIRST NAME",customer_lastname as "LAST NAME",customer_email as "EMAIL",customer_phonenumber as "PHONE",plan_name as "PLAN NAME" from customer c,plan p where p.plan_id=c.plan_id and p.plan_name='Premium';



- The below query displays the count of customers paying through debit/credit cards for Hulu.

```
select card_type,count(*) as count from customer c,plan p,stream_plan
sp,streaming_services ss where p.plan_id=c.plan_id and p.plan_id=sp.plan_id and
sp.stream_id=ss.stream_id and ss.stream_servicename='Hulu' group by card_type;
```

The screenshot shows the Oracle Live SQL interface. The query executed is: `select card_type,count(*) as count from customer c,plan p,stream_plan sp,streaming_services ss where p.plan_id=c.plan_id and p.plan_id=sp.plan_id and sp.stream_id=ss.stream_id and ss.stream_servicename='Hulu' group by card_type;`. The result is displayed in a table with two columns: CARD_TYPE and COUNT. The data shows 2 credit cards and 1 debit card.

CARD_TYPE	COUNT
credit	2
debit	1

Download CSV
2 rows selected.

- The following query displays the list of user details (First name and Email) using different streaming services and the state they belong to.

```
select customer_firstname,customer_email,state_province,stream_servicename from
customer c,plan p,stream_plan sp,streaming_services ss where p.plan_id=c.plan_id and
p.plan_id=sp.plan_id and sp.stream_id=ss.stream_id order by stream_servicename asc;
```

The screenshot shows the Oracle Live SQL interface. The query executed is: `select customer_firstname,customer_email,state_province,stream_servicename from customer c,plan p,stream_plan sp,streaming_services ss where p.plan_id=c.plan_id and p.plan_id=sp.plan_id and sp.stream_id=ss.stream_id order by stream_servicename asc;`. The result is displayed in a table with four columns: CUSTOMER_FIRSTNAME, CUSTOMER_EMAIL, STATE_PROVINCE, and STREAM_SERVICENAME. The data is ordered by streaming service name.

CUSTOMER_FIRSTNAME	CUSTOMER_EMAIL	STATE_PROVINCE	STREAM_SERVICENAME
Jenna	jenled@gmail.com	DC	Amazon prime video
Rachelle	rachlam@gmail.com	TS	Amazon prime video
Rafael	Rafael@gmail.com	AZ	Amazon prime video
Ben	Ben@gmail.com	GA	Amazon prime video
Jacob	Jacob@gmail.com	PA	Hulu
Abdullah	Abdullah@gmail.com	NY	Hulu
Teresa	terolis@gmail.com	VA	Hulu
Jaya	jayagu@gmail.com	CA	Neflix
Eugene	Eugene@gmail.com	SC	Neflix
John	johnic@gmail.com	TX	Neflix

Download CSV
10 rows selected.

5. The below query displays the count of users for each streaming service.

```
select stream_servicename as "STREAMING SERVICE NAME",count(*) as "USER COUNT"
from customer c,plan p,stream_plan sp,streaming_services ss where p.plan_id=c.plan_id
and p.plan_id=sp.plan_id and sp.stream_id=ss.stream_id group by stream_servicename;
```

The screenshot shows the Oracle Live SQL interface in a Chrome browser. The SQL Worksheet contains the following query:

```
1 select stream_servicename as "STREAMING SERVICE NAME",count(*) as "USER COUNT"
2 from customer c,plan p,stream_plan sp,streaming_services ss where p.plan_id=c.plan_id
3 and p.plan_id=sp.plan_id and sp.stream_id=ss.stream_id group by stream_servicename;
4
```

The results are displayed in a table:

STREAMING SERVICE NAME	USER COUNT
Amazon prime video	4
Neflix	3
Hulu	3

Below the table, it says "Download CSV" and "3 rows selected." The footer of the interface shows "© 2020 Oracle Corporation - Privacy - Terms of Use" and "Live SQL 20.2.2, running Oracle Database 19c Enterprise Edition - 19.5.0.0.0 Built with ♥ using Oracle APEX".

6. The below query displays the titles of the movies which belong to genre "Horror" or has genre id as "113013"

```
select content_title as title,genre_name from content c,genre g where
c.content_id=g.content_id and g.genre_name='Horror' or g.genre_id='113013';
```

The screenshot shows the Oracle Live SQL interface in a Chrome browser. The SQL Worksheet contains the following query:

```
1 select content_title as title,genre_name from content c,genre g where c.content_id=g.content_id and g.genre_name='Horror' or g.genre_id='113013';
2
3
4
```

The results are displayed in a table:

TITLE	GENRE_NAME
Guardians of the Galaxy	Documentary
Prometheus	Documentary
Split	Documentary
Sing	Documentary
Suicide Squad	Documentary
Split	Horror

Below the table, it says "Download CSV" and "6 rows selected." The footer of the interface shows "© 2020 Oracle Corporation - Privacy - Terms of Use" and "Live SQL 20.2.2, running Oracle Database 19c Enterprise Edition - 19.5.0.0.0 Built with ♥ using Oracle APEX".

7. The below query displays the names of the crew members who won awards for their work in the respective movies.

```
select firstname,lastname,content_title,award_name from crew c, content_crew cc,  
content co,awards a where c.crew_id=cc.crew_id and cc.content_id=co.content_id and  
co.award_id=a.award_id;
```

The screenshot shows the Oracle Live SQL interface in a web browser. The query entered in the SQL Worksheet is:

```
1 select firstname,lastname,content_title,award_name from crew c, content_crew cc, content co,awards a  
2 where c.crew_id=cc.crew_id and cc.content_id=co.content_id and co.award_id=a.award_id;  
3  
4
```

The results are displayed in a table with the following data:

FIRSTNAME	LASTNAME	CONTENT_TITLE	AWARD_NAME
Remi	Watt	Sing	Best Original Screenplay
Anderson	Ayers	Split	Best Cinematography
Soren	Valdez	Suicide Squad	Best Cinematography
Lilia	Adam	Guardians of the Galaxy	Best Special Effects
Rafael	Hoover	Prometheus	Best Supporting Actor

Below the table, it says "Download CSV" and "5 rows selected." The footer of the interface includes the Oracle logo, "Integrated Cloud", and copyright information for 2020 Oracle Corporation.