

1) Creating Database:

```
CREATE DATABASE media_streaming;  
USE media_streaming;
```

```
mysql> CREATE DATABASE media_streaming;  
Query OK, 1 row affected (0.01 sec)  
  
mysql> USE media_streaming;  
Database changed
```

2) Table Creation :

-- Create the customer table

```
CREATE TABLE customer (  
    customer_id    INTEGER PRIMARY KEY AUTO_INCREMENT,  
    first_name     VARCHAR(15),  
    last_name      VARCHAR(15),  
    email_id       VARCHAR(32),  
    phone_number   VARCHAR(12),  
    state          VARCHAR(19),  
    country        VARCHAR(13),  
    sign_up_date   DATE  
);
```

```
mysql> CREATE TABLE customer (  
->     customer_id    INTEGER PRIMARY KEY AUTO_INCREMENT,  
->     first_name     VARCHAR(15),  
->     last_name      VARCHAR(15),  
->     email_id       VARCHAR(32),  
->     phone_number   VARCHAR(12),  
->     state          VARCHAR(19),  
->     country        VARCHAR(13),  
->     sign_up_date   DATE  
-> );  
Query OK, 0 rows affected (0.03 sec)
```

-- Create the customer_plan table

```
CREATE TABLE customer_plan (  
    customer_id    INTEGER PRIMARY KEY,  
    plan           VARCHAR(8),  
    total_payments DECIMAL(10,2),  
    FOREIGN KEY (customer_id) REFERENCES customer(customer_id)  
);
```

```
mysql> CREATE TABLE customer_plan (
->     customer_id    INTEGER PRIMARY KEY,
->     plan           VARCHAR(8),
->     total_payments DECIMAL(10,2),
->     FOREIGN KEY (customer_id) REFERENCES customer(customer_id)
-> );
Query OK, 0 rows affected (0.03 sec)
```

-- Create the content table

```
CREATE TABLE content (
    content_id    INTEGER PRIMARY KEY AUTO_INCREMENT,
    title         VARCHAR(90),
    genre         VARCHAR(29),
    duration      INTEGER,
    cost_per_stream DECIMAL(6,2),
    release_date  DATE,
    distributor    VARCHAR(36)
);
```

```
mysql> CREATE TABLE content (
->     content_id    INTEGER PRIMARY KEY AUTO_INCREMENT,
->     title         VARCHAR(90),
->     genre         VARCHAR(29),
->     duration      INTEGER,
->     cost_per_stream DECIMAL(6,2),
->     release_date  DATE,
->     distributor    VARCHAR(36)
-> );
Query OK, 0 rows affected (0.03 sec)
```

-- Create the streams table

```
CREATE TABLE streams (
    stream_id    INTEGER PRIMARY KEY AUTO_INCREMENT,
    customer_id  INTEGER,
    content_id   INTEGER,
    stream_date  DATE,
    stream_time  VARCHAR(50),
    stream_duration INTEGER,
    stream_rating INTEGER,
    FOREIGN KEY (customer_id) REFERENCES customer(customer_id),
    FOREIGN KEY (content_id) REFERENCES content(content_id)
);
```

```
mysql> CREATE TABLE streams (
->   stream_id      INTEGER PRIMARY KEY AUTO_INCREMENT,
->   customer_id    INTEGER,
->   content_id     INTEGER,
->   stream_date    DATE,
->   stream_time    VARCHAR(50),
->   stream_duration INTEGER,
->   stream_rating  INTEGER,
->   FOREIGN KEY (customer_id) REFERENCES customer(customer_id),
->   FOREIGN KEY (content_id) REFERENCES content(content_id)
-> );
Query OK, 0 rows affected (0.04 sec)
```

-- Create the invoice table

```
CREATE TABLE invoice (
  invoice_number INTEGER PRIMARY KEY AUTO_INCREMENT,
  customer_id    INTEGER,
  plan           VARCHAR(8),
  service_period VARCHAR(25),
  payment_method VARCHAR(15),
  total          DECIMAL(10,2),
  FOREIGN KEY (customer_id) REFERENCES customer(customer_id)
);
```

```
mysql> CREATE TABLE invoice (
->   invoice_number INTEGER PRIMARY KEY AUTO_INCREMENT,
->   customer_id    INTEGER,
->   plan           VARCHAR(8),
->   service_period VARCHAR(25),
->   payment_method VARCHAR(15),
->   total          DECIMAL(10,2),
->   FOREIGN KEY (customer_id) REFERENCES customer(customer_id)
-> );
Query OK, 0 rows affected (0.03 sec)
```

3) Data Insertion to customer table:

DELIMITER \$\$

```
CREATE PROCEDURE insert_customer_data()
BEGIN
  DECLARE i INT DEFAULT 1;

  WHILE i <= 10000 DO
    INSERT INTO customer (customer_id, first_name, last_name, email_id,
phone_number, state, country, sign_up_date)
    VALUES (
      i,
      CONCAT('FirstName_', i),
```

```

        CONCAT('LastName_', i),
        CONCAT('user', i, '@example.com'),
        CONCAT('555-', LPAD(i, 4, '0')),
        CASE
            WHEN i % 5 = 0 THEN 'California'
            WHEN i % 5 = 1 THEN 'Texas'
            WHEN i % 5 = 2 THEN 'New York'
            WHEN i % 5 = 3 THEN 'Florida'
            ELSE 'Nevada'
        END,
        'USA',
        CURRENT_DATE - INTERVAL (i * 10) DAY
    );

    SET i = i + 1;
END WHILE;
END $$

DELIMITER ;

```

```

mysql> DELIMITER $$
mysql>
mysql> CREATE PROCEDURE insert_customer_data()
-> BEGIN
->     DECLARE i INT DEFAULT 1;
->
->     WHILE i <= 10000 DO
->         INSERT INTO customer (customer_id, first_name, last_name, email_id, phone_number, state, country, sign_up_date)
->         VALUES (
->             i,
->             CONCAT('FirstName_', i),
->             CONCAT('LastName_', i),
->             CONCAT('user', i, '@example.com'),
->             CONCAT('555-', LPAD(i, 4, '0')),
->             CASE
->                 WHEN i % 5 = 0 THEN 'California'
->                 WHEN i % 5 = 1 THEN 'Texas'
->                 WHEN i % 5 = 2 THEN 'New York'
->                 WHEN i % 5 = 3 THEN 'Florida'
->                 ELSE 'Nevada'
->             END,
->             'USA',
->             CURRENT_DATE - INTERVAL (i * 10) DAY
->         );
->
->         SET i = i + 1;
->     END WHILE;
-> END $$
Query OK, 0 rows affected (0.01 sec)

```

4) Calling the function to insert data:

```
CALL insert_customer_data();
```

```

mysql> CALL insert_customer_data();
Query OK, 1 row affected (32.75 sec)

```

5) Data insertion to customer_plan_table:

DELIMITER \$\$

```
CREATE PROCEDURE insert_customer_plan_data()
BEGIN
    DECLARE i INT DEFAULT 1;

    WHILE i <= 10000 DO
        INSERT INTO customer_plan (customer_id, plan, total_payments)
        VALUES (
            i,
            CASE
                WHEN i % 3 = 0 THEN 'Basic'
                WHEN i % 3 = 1 THEN 'Premium'
                ELSE 'Standard'
            END,
            ROUND(RAND() * 1000, 2)
        );

        SET i = i + 1;
    END WHILE;
END $$

DELIMITER ;
```

```

mysql> DELIMITER $$
mysql>
mysql> CREATE PROCEDURE insert_customer_plan_data()
-> BEGIN
->     DECLARE i INT DEFAULT 1;
->
->     WHILE i <= 10000 DO
->         INSERT INTO customer_plan (customer_id, plan, total_payments)
->         VALUES (
->             i,
->             CASE
->                 WHEN i % 3 = 0 THEN 'Basic'
->                 WHEN i % 3 = 1 THEN 'Premium'
->                 ELSE 'Standard'
->             END,
->             ROUND(RAND() * 1000, 2)
->         );
->
->         SET i = i + 1;
->     END WHILE;
-> END $$
Query OK, 0 rows affected (0.01 sec)

mysql>
mysql> DELIMITER ;

```

6) Calling the function to insert data:

CALL insert_customer_plan_data();

```

mysql> CALL insert_customer_plan_data();
Query OK, 1 row affected (34.57 sec)

```

7) Data insertion to Content Table:

DELIMITER \$\$

CREATE PROCEDURE insert_content_data()

BEGIN

DECLARE i INT DEFAULT 1;

WHILE i <= 10000 DO

INSERT INTO content (content_id, title, genre, duration, cost_per_stream,
release_date, distributor)

VALUES (

i,

CONCAT('Content Title ', i),

CASE

WHEN i % 5 = 0 THEN 'Action'

WHEN i % 5 = 1 THEN 'Drama'

WHEN i % 5 = 2 THEN 'Comedy'

WHEN i % 5 = 3 THEN 'Horror'

```

        ELSE 'Documentary'
    END,
    FLOOR(RAND() * 180) + 30, -- Random duration between 30 and 210 minutes
    ROUND(RAND() * 10, 2), -- Random cost per stream between 0 and 10
    CURRENT_DATE - INTERVAL (i * 30) DAY,
    CONCAT('Distributor_', i)
);

SET i = i + 1;
END WHILE;
END $$

DELIMITER ;

```

```

mysql> DELIMITER $$
mysql>
mysql> CREATE PROCEDURE insert_content_data()
-> BEGIN
->     DECLARE i INT DEFAULT 1;
->
->     WHILE i <= 10000 DO
->         INSERT INTO content (content_id, title, genre, duration, cost_per_stream, release_date, distributor)
->         VALUES (
->             i,
->             CONCAT('Content Title ', i),
->             CASE
->                 WHEN i % 5 = 0 THEN 'Action'
->                 WHEN i % 5 = 1 THEN 'Drama'
->                 WHEN i % 5 = 2 THEN 'Comedy'
->                 WHEN i % 5 = 3 THEN 'Horror'
->                 ELSE 'Documentary'
->             END,
->             FLOOR(RAND() * 180) + 30, -- Random duration between 30 and 210 minutes
->             ROUND(RAND() * 10, 2), -- Random cost per stream between 0 and 10
->             CURRENT_DATE - INTERVAL (i * 30) DAY,
->             CONCAT('Distributor_', i)
->         );
->
->         SET i = i + 1;
->     END WHILE;
-> END $$
Query OK, 0 rows affected (0.01 sec)

mysql>
mysql> DELIMITER ;

```

8) Calling the function to insert data:

CALL insert_content_data();

```

mysql> CALL insert_content_data();
Query OK, 1 row affected (41.21 sec)

```

9) Data insertion to streams table:

DELIMITER \$\$

```

CREATE PROCEDURE insert_streams_data()
BEGIN

```

```

DECLARE i INT DEFAULT 1;

WHILE i <= 10000 DO
    INSERT INTO streams (stream_id, customer_id, content_id, stream_date,
stream_time, stream_duration, stream_rating)
        VALUES (
            i,
            FLOOR(RAND() * 10000) + 1, -- Random customer_id between 1 and 10000
            FLOOR(RAND() * 10000) + 1, -- Random content_id between 1 and 10000
            CURRENT_DATE - INTERVAL (i * 2) DAY,
            CONCAT(FLOOR(RAND() * 24), ':', LPAD(FLOOR(RAND() * 60), 2, '0')),
            FLOOR(RAND() * 120) + 30, -- Random stream duration between 30 and 150
minutes
            FLOOR(RAND() * 5) + 1 -- Random rating between 1 and 5
        );

    SET i = i + 1;
END WHILE;
END $$

DELIMITER ;

```

```

mysql> DELIMITER $$
mysql>
mysql> CREATE PROCEDURE insert_streams_data()
-> BEGIN
->     DECLARE i INT DEFAULT 1;
->
->     WHILE i <= 10000 DO
->         INSERT INTO streams (stream_id, customer_id, content_id, stream_date, stream_time, stream_duration, stream_rating)
->             VALUES (
->                 i,
->                 FLOOR(RAND() * 10000) + 1, -- Random customer_id between 1 and 10000
->                 FLOOR(RAND() * 10000) + 1, -- Random content_id between 1 and 10000
->                 CURRENT_DATE - INTERVAL (i * 2) DAY,
->                 CONCAT(FLOOR(RAND() * 24), ':', LPAD(FLOOR(RAND() * 60), 2, '0')),
->                 FLOOR(RAND() * 120) + 30, -- Random stream duration between 30 and 150 minutes
->                 FLOOR(RAND() * 5) + 1 -- Random rating between 1 and 5
->             );
->
->         SET i = i + 1;
->     END WHILE;
-> END $$
Query OK, 0 rows affected (0.01 sec)

mysql>
mysql> DELIMITER ;

```

10) Calling the function to insert data:

CALL insert_streams_data();

```

mysql> CALL insert_streams_data();
Query OK, 1 row affected (32.46 sec)

```

11) Data Insertion to Invoice Table:

DELIMITER \$\$


```

CREATE PROCEDURE insert_invoice_data()
BEGIN
    DECLARE i INT DEFAULT 1;

    WHILE i <= 10000 DO
        INSERT INTO invoice (invoice_number, customer_id, plan, service_period,
payment_method, total)
        VALUES (
            i,
            FLOOR(RAND() * 10000) + 1, -- Random customer_id between 1 and 10000
            CASE
                WHEN i % 3 = 0 THEN 'Basic'
                WHEN i % 3 = 1 THEN 'Premium'
                ELSE 'Standard'
            END,
            CONCAT('Period_', FLOOR(RAND() * 12) + 1), -- Random service period
between 1 and 12
            CASE
                WHEN i % 2 = 0 THEN 'Credit Card'
                ELSE 'PayPal'
            END,
            ROUND(RAND() * 200, 2) -- Random total amount between 0 and 200
        );

        SET i = i + 1;
    END WHILE;
END $$

DELIMITER ;

```

```

mysql> DELIMITER $$
mysql>
mysql> CREATE PROCEDURE insert_invoice_data()
-> BEGIN
->     DECLARE i INT DEFAULT 1;
->
->     WHILE i <= 10000 DO
->         INSERT INTO invoice (invoice_number, customer_id, plan, service_period, payment_method, total)
->         VALUES (
->             i,
->             FLOOR(RAND() * 10000) + 1, -- Random customer_id between 1 and 10000
->             CASE
->                 WHEN i % 3 = 0 THEN 'Basic'
->                 WHEN i % 3 = 1 THEN 'Premium'
->                 ELSE 'Standard'
->             END,
->             CONCAT('Period_', FLOOR(RAND() * 12) + 1), -- Random service period between 1 and 12
->             CASE
->                 WHEN i % 2 = 0 THEN 'Credit Card'
->                 ELSE 'PayPal'
->             END,
->             ROUND(RAND() * 200, 2) -- Random total amount between 0 and 200
->         );
->
->         SET i = i + 1;
->     END WHILE;
-> END $$
Query OK, 0 rows affected (0.01 sec)

mysql>
mysql> DELIMITER ;

```

12) Calling the function to insert data:

CALL insert_invoice_data();

```

mysql> CALL insert_invoice_data();
Query OK, 1 row affected (41.01 sec)

```

Create (Insert) Operations:

- **Insert a New Customer:**

```

INSERT INTO customer (first_name, last_name, email_id, phone_number,
state, country, sign_up_date)
VALUES ('John', 'Doe', 'john.doe@example.com', '555-1234',
'California', 'USA', CURRENT_DATE);

```

```

mysql> INSERT INTO customer (first_name, last_name, email_id, phone_number, state, country, sign_up_date)
-> VALUES ('John', 'Doe', 'john.doe@example.com', '555-1234', 'California', 'USA', CURRENT_DATE);
Query OK, 1 row affected (0.04 sec)

```

- **Insert New Content:**

```

INSERT INTO content (title, genre, duration, cost_per_stream,
release_date, distributor)
VALUES ('Movie Title', 'Action', 120, 5.99, '2023-12-01',
'Distributor_1');

```

```
mysql> INSERT INTO content (title, genre, duration, cost_per_stream, release_date, distributor)
-> VALUES ('Movie Title', 'Action', 120, 5.99, '2023-12-01', 'Distributor_1');
Query OK, 1 row affected (0.02 sec)
```

- **Insert New Stream:**

```
INSERT INTO streams (customer_id, content_id, stream_date,
stream_time, stream_duration, stream_rating)
VALUES (1, 1, '2024-12-15', '14:30', 90, 5);
```

```
mysql> INSERT INTO streams (customer_id, content_id, stream_date, stream_time, stream_duration, stream_rating)
-> VALUES (1, 1, '2024-12-15', '14:30', 90, 5);
Query OK, 1 row affected (0.01 sec)
```

- **Insert New Invoice:**

```
INSERT INTO invoice (customer_id, plan, service_period,
payment_method, total)
VALUES (1, 'Premium', '2024-12', 'Credit Card', 99.99);
```

```
mysql> INSERT INTO invoice (customer_id, plan, service_period, payment_method, total)
-> VALUES (1, 'Premium', '2024-12', 'Credit Card', 99.99);
Query OK, 1 row affected (0.01 sec)
```

Read (Select) Operations:

- **Select All Customers:**

```
SELECT * FROM customer;
```

```
mysql> SELECT * FROM customer;
```

customer_id	first_name	last_name	email_id	phone_number	state	country	sign_up_date
1	FirstName_1	LastName_1	user1@example.com	555-0001	Texas	USA	2024-12-05
2	FirstName_2	LastName_2	user2@example.com	555-0002	New York	USA	2024-11-25
3	FirstName_3	LastName_3	user3@example.com	555-0003	Florida	USA	2024-11-15
4	FirstName_4	LastName_4	user4@example.com	555-0004	Nevada	USA	2024-11-05
5	FirstName_5	LastName_5	user5@example.com	555-0005	California	USA	2024-10-26
6	FirstName_6	LastName_6	user6@example.com	555-0006	Texas	USA	2024-10-16
7	FirstName_7	LastName_7	user7@example.com	555-0007	New York	USA	2024-10-06
8	FirstName_8	LastName_8	user8@example.com	555-0008	Florida	USA	2024-09-26
9	FirstName_9	LastName_9	user9@example.com	555-0009	Nevada	USA	2024-09-16
10	FirstName_10	LastName_10	user10@example.com	555-0010	California	USA	2024-09-06
11	FirstName_11	LastName_11	user11@example.com	555-0011	Texas	USA	2024-08-27
12	FirstName_12	LastName_12	user12@example.com	555-0012	New York	USA	2024-08-17
13	FirstName_13	LastName_13	user13@example.com	555-0013	Florida	USA	2024-08-07
14	FirstName_14	LastName_14	user14@example.com	555-0014	Nevada	USA	2024-07-28
15	FirstName_15	LastName_15	user15@example.com	555-0015	California	USA	2024-07-18
16	FirstName_16	LastName_16	user16@example.com	555-0016	Texas	USA	2024-07-08
17	FirstName_17	LastName_17	user17@example.com	555-0017	New York	USA	2024-06-28

- **Select Customer by customer_id:**

SELECT * FROM customer WHERE customer_id = 1;

```
mysql> SELECT * FROM customer WHERE customer_id = 1;
+-----+-----+-----+-----+-----+-----+-----+-----+
| customer_id | first_name | last_name | email_id | phone_number | state | country | sign_up_date |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | FirstName_1 | LastName_1 | user1@example.com | 555-0001 | Texas | USA | 2024-12-05 |
+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

- **Select All Content of Genre 'Action':**

SELECT * FROM content WHERE genre = 'Action';

```
mysql> SELECT * FROM content WHERE genre = 'Action';
+-----+-----+-----+-----+-----+-----+-----+
| content_id | title | genre | duration | cost_per_stream | release_date | distributor |
+-----+-----+-----+-----+-----+-----+-----+
| 5 | Content Title 5 | Action | 108 | 6.87 | 2024-07-18 | Distributor_5 |
| 10 | Content Title 10 | Action | 87 | 3.81 | 2024-02-19 | Distributor_10 |
| 15 | Content Title 15 | Action | 87 | 6.22 | 2023-09-22 | Distributor_15 |
| 20 | Content Title 20 | Action | 90 | 2.14 | 2023-04-25 | Distributor_20 |
| 25 | Content Title 25 | Action | 190 | 2.30 | 2022-11-26 | Distributor_25 |
| 30 | Content Title 30 | Action | 168 | 7.81 | 2022-06-29 | Distributor_30 |
| 35 | Content Title 35 | Action | 48 | 2.63 | 2022-01-30 | Distributor_35 |
| 40 | Content Title 40 | Action | 110 | 6.13 | 2021-09-02 | Distributor_40 |
| 45 | Content Title 45 | Action | 57 | 9.18 | 2021-04-05 | Distributor_45 |
| 50 | Content Title 50 | Action | 163 | 4.64 | 2020-11-06 | Distributor_50 |
| 55 | Content Title 55 | Action | 58 | 7.77 | 2020-06-09 | Distributor_55 |
| 60 | Content Title 60 | Action | 45 | 0.49 | 2020-01-11 | Distributor_60 |
| 65 | Content Title 65 | Action | 205 | 4.96 | 2019-08-14 | Distributor_65 |
| 70 | Content Title 70 | Action | 108 | 3.49 | 2019-03-17 | Distributor_70 |
| 75 | Content Title 75 | Action | 156 | 0.14 | 2018-10-18 | Distributor_75 |
| 80 | Content Title 80 | Action | 204 | 3.31 | 2018-05-21 | Distributor_80 |
| 85 | Content Title 85 | Action | 140 | 2.06 | 2017-12-22 | Distributor_85 |
| 90 | Content Title 90 | Action | 183 | 9.20 | 2017-07-25 | Distributor_90 |
+-----+-----+-----+-----+-----+-----+-----+
```

- **Select Streams by Customer:**

SELECT * FROM streams WHERE customer_id = 1;

```
mysql> SELECT * FROM streams WHERE customer_id = 1;
+-----+-----+-----+-----+-----+-----+-----+
| stream_id | customer_id | content_id | stream_date | stream_time | stream_duration | stream_rating |
+-----+-----+-----+-----+-----+-----+-----+
| 2646 | 1 | 526 | 2010-06-20 | 6:09 | 148 | 3 |
| 7223 | 1 | 235 | 1985-05-28 | 2:30 | 57 | 3 |
| 10001 | 1 | 1 | 2024-12-15 | 14:30 | 90 | 5 |
+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

- **Select Invoices for 'Premium' Plan:**

SELECT * FROM invoice WHERE plan = 'Premium';

```
mysql> SELECT * FROM invoice WHERE plan = 'Premium';
```

invoice_number	customer_id	plan	service_period	payment_method	total
1	9107	Premium	Period_12	PayPal	31.46
4	8425	Premium	Period_12	Credit Card	57.45
7	5533	Premium	Period_4	PayPal	190.69
10	1767	Premium	Period_9	Credit Card	15.14
13	7625	Premium	Period_1	PayPal	22.85
16	6749	Premium	Period_4	Credit Card	51.11
19	7944	Premium	Period_8	PayPal	163.70
22	4037	Premium	Period_3	Credit Card	135.41
25	7060	Premium	Period_11	PayPal	42.89
28	6803	Premium	Period_2	Credit Card	77.46
31	93	Premium	Period_3	PayPal	165.16
34	2239	Premium	Period_11	Credit Card	156.83
37	4910	Premium	Period_6	PayPal	175.10
40	8290	Premium	Period_3	Credit Card	70.01
43	5408	Premium	Period_4	PayPal	184.85
46	6846	Premium	Period_9	Credit Card	98.66
49	9363	Premium	Period_11	PayPal	104.46

Update Operations:

- **Update Customer Email:**

```
UPDATE customer
SET email_id = 'new.email@example.com'
WHERE customer_id = 1;
```

```
mysql> UPDATE customer
-> SET email_id = 'new.email@example.com'
-> WHERE customer_id = 1;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

- **Update Content Cost per Stream:**

```
UPDATE content
SET cost_per_stream = 7.99
WHERE content_id = 1;
```

```
mysql> UPDATE content
      -> SET cost_per_stream = 7.99
      -> WHERE content_id = 1;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

- **Update Stream Rating:**

```
UPDATE streams
SET stream_rating = 4
WHERE stream_id = 1;
```

```
mysql> UPDATE streams
      -> SET stream_rating = 4
      -> WHERE stream_id = 1;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

- **Update Invoice Total Amount:**

```
UPDATE invoice
SET total = 109.99
WHERE invoice_number = 1;
```

```
mysql> UPDATE invoice
      -> SET total = 109.99
      -> WHERE invoice_number = 1;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

Delete Operations:

- **Delete a Customer:**

```
DELETE FROM customer WHERE customer_id = 1;
```

- **Delete Content:**

```
DELETE FROM content WHERE content_id = 1;
```

- **Delete a Stream:**

```
DELETE FROM streams WHERE stream_id = 1;
```

- **Delete an Invoice:**

```
DELETE FROM invoice WHERE invoice_number = 1;
```

5. Join Queries:

- **Get All Customer Names with Their Plan and Total Payments:**

```
SELECT c.first_name, c.last_name, cp.plan, cp.total_payments
FROM customer c
JOIN customer_plan cp ON c.customer_id = cp.customer_id;
```

```
mysql> SELECT c.first_name, c.last_name, cp.plan, cp.total_payments
-> FROM customer c
-> JOIN customer_plan cp ON c.customer_id = cp.customer_id;
```

first_name	last_name	plan	total_payments
FirstName_1	LastName_1	Premium	429.72
FirstName_2	LastName_2	Standard	360.83
FirstName_3	LastName_3	Basic	514.98
FirstName_4	LastName_4	Premium	492.40
FirstName_5	LastName_5	Standard	917.05
FirstName_6	LastName_6	Basic	108.06
FirstName_7	LastName_7	Premium	789.14
FirstName_8	LastName_8	Standard	621.53
FirstName_9	LastName_9	Basic	740.21
FirstName_10	LastName_10	Premium	836.49
FirstName_11	LastName_11	Standard	961.79
FirstName_12	LastName_12	Basic	299.51
FirstName_13	LastName_13	Premium	612.15
FirstName_14	LastName_14	Standard	162.24
FirstName_15	LastName_15	Basic	974.74
FirstName_16	LastName_16	Premium	386.99
FirstName_17	LastName_17	Standard	10.71
FirstName_18	LastName_18	Basic	892.61
FirstName_19	LastName_19	Premium	430.91

- **Get All Streamed Content and Stream Rating for a Customer:**

```
SELECT s.stream_date, s.stream_time, c.title, s.stream_rating
FROM streams s
JOIN content c ON s.content_id = c.content_id
```

WHERE s.customer_id = 1;

```
mysql> SELECT s.stream_date, s.stream_time, c.title, s.stream_rating
-> FROM streams s
-> JOIN content c ON s.content_id = c.content_id
-> WHERE s.customer_id = 1;
```

stream_date	stream_time	title	stream_rating
2010-06-20	6:09	Content Title 526	3
1985-05-28	2:30	Content Title 235	3
2024-12-15	14:30	Content Title 1	5

3 rows in set (0.00 sec)

- **Get All Invoices and Corresponding Customer Information:**

```
SELECT i.invoice_number, c.first_name, c.last_name, i.total
FROM invoice i
JOIN customer c ON i.customer_id = c.customer_id;
```

```
mysql> SELECT i.invoice_number, c.first_name, c.last_name, i.total
-> FROM invoice i
-> JOIN customer c ON i.customer_id = c.customer_id;
```

invoice_number	first_name	last_name	total
143	FirstName_1	LastName_1	117.81
10001	FirstName_1	LastName_1	99.99
3994	FirstName_2	LastName_2	176.75
5181	FirstName_3	LastName_3	191.95
5367	FirstName_3	LastName_3	74.91
1065	FirstName_5	LastName_5	151.38
8296	FirstName_5	LastName_5	70.74
8032	FirstName_6	LastName_6	5.34
1550	FirstName_7	LastName_7	31.45
5912	FirstName_10	LastName_10	80.97
3907	FirstName_11	LastName_11	75.34
8687	FirstName_12	LastName_12	59.34
9078	FirstName_15	LastName_15	34.25
6092	FirstName_17	LastName_17	40.03
9885	FirstName_17	LastName_17	70.88
4158	FirstName_20	LastName_20	57.65
7133	FirstName_20	LastName_20	73.35
6553	FirstName_22	LastName_22	188.65
1060	FirstName_23	LastName_23	147.53