ONLINE BOOKSTORE DATABASE

- To creating Projects in SQL topic is ONLINE BOOKSTORE DATABASE.

- To creating different table in database and Evaluate in all task.

- To show below in All table Name and Columns and then next page to show All task Query and Output.

ONLINE BOOKSTORE DATASETS

BOOKS_DATASET

- Book_ID
- Title
- Author
- Publication_year
- Price
- Available_quantity

CUSTOMERS_DATASET

- Customer_ID
- First_name
- Last_name
- Email
- Registration_Date

ORDERS_DATASET

- Order_ID
- Customer_ID
- Order_Date
- Total_amount

ORDER_DETAILS_DATASET

- Order_ID
- Book_ID
- Quantity
- Subtotal

RETRIEVE A LIST OF BOOKS (BOOK TITLE AND AUTHOR) PUBLISHED IN THE YEAR 2022

QUERY:

```
mysql> SELECT title, author
    -> FROM Books_dataset
    -> WHERE publication_year = 2022;
```

OUTPUT:

```
+--------------------------------+----------------------------+
| title                          | author                     |
+--------------------------------+----------------------------+
| The Rabbit Hutch               | Tess Gunty                 |
| Forever Home                   | Graham Norton              |
| Musical Tables: Poems          | Billy Collins              |
| Horse                          | Geraldine Brooks           |
| The Quarry Girls               | Jess Lourey                |
| Best of Friends                | Kamila Shamsie             |
| Duas Noites em Lisboa          | Chris  Pavone              |
| Inciting Joy: Essays           | Ross Gay                   |
| Thirst                         | Varsha Bajaj               |
| Glad My Mom Died               | Jennette McCurdy           |
| Poems for the Signs            | Michaela Angemeer          |
| All Good People Here           | Ashley Flowers             |
| The Satsuma Complex            | Bob Mortimer               |
| I'm Glad My Mom Died           | Jennette McCurdy           |
| The Tryout: A Graphic Novel    | Christina Soontornvat      |
| The London Girls               | Soraya M. Lane             |
| Ask for Andrea                 | Noelle W. Ihli             |
| We Do What We Do in the Dark   | Michelle  Hart             |
| Maggie Moves On                | Lucy Score                 |
| Now Is Not the Time to Panic   | Kevin    Wilson            |
| Lo que hay                     | Sara Torres                |
| The Bletchley Women            | Patricia  Adrian           |
+--------------------------------+----------------------------+
22 rows in set (0.00 sec)
```

CALCULATE THE TOTAL REVENUE GENERATED BY THE BOOKSTORE IN THE YEAR 2022

QUERY:

```
mysql> SELECT SUM(total_amount) AS total_revenue
    -> FROM Orders_Dataset
    -> WHERE Order_date BETWEEN '2022-01-01' AND '2022-12-31';
```

OUTPUT:


```
+----------------+
| total_revenue  |
+----------------+
|         239629 |
+----------------+
1 row in set (0.01 sec)
```

FIND THE TOP 5 BESTSELLING BOOKS (BASED ON THE TOTAL QUANTITY SOLD) IN DESCENDING ORDER

QUERY:

```
mysql> SELECT books_dataset.title, books_dataset.author,
    -> SUM(order_details_dataset.quantity) AS total_quantity_sold
    -> FROM Order_Details_Dataset
    -> JOIN Books_Dataset ON order_details_dataset.book_id = Books_Dataset.book_id
    -> GROUP BY order_details_dataset.book_id, Books_Dataset.title, Books_Dataset.author
    -> ORDER BY total_quantity_sold DESC
    -> LIMIT 5;
```

OUTPUT:

```
                                  LIMIT 5,
+-----------------------+----------------+----------------------+
| title                 | author         | total_quantity_sold  |
+-----------------------+----------------+----------------------+
| Donde todo brilla     | Alice Kellen   |                   34 |
| The Bones of the Story| Carol Goodman  |                   32 |
| Accidental Attachment | Max Monroe     |                   31 |
| Duas Noites em Lisboa | Chris  Pavone  |                   30 |
| Bezmatek              | Mira Marcin    |                   30 |
+-----------------------+----------------+----------------------+
5 rows in set (0.01 sec)
```

DETERMINE THE CUSTOMER WHO MADE THE HIGHEST TOTAL PURCHASE AMOUNT AND THE TOTAL AMOUNT THEY SPENT

QUERY:

```
mysql> SELECT customers_dataset.customer_id, customers_dataset.first_name, customers_dataset.last_name,
    -> SUM(orders_dataset.total_amount) AS total_purchase_amount
    -> FROM customers_dataset
    -> JOIN orders_dataset ON customers_dataset.customer_id = orders_dataset.customer_id
    -> GROUP BY customers_dataset.customer_id, customers_dataset.first_name, customers_dataset.last_name
    -> ORDER BY total_purchase_amount DESC
    -> LIMIT 1;
```

OUTPUT:

```
+-------------+------------+-----------+-----------------------+
| customer_id | first_name | last_name | total_purchase_amount |
+-------------+------------+-----------+-----------------------+
| DC-17500    | Dave       | Chong     |                140600 |
+-------------+------------+-----------+-----------------------+
1 row in set (0.00 sec)
```

CALCULATE THE AVERAGE PRICE OF BOOKS PUBLISHED BEFORE THE YEAR 2010

QUERY:

```
mysql> SELECT AVG(price) AS average_price
    -> FROM books_dataset
    -> WHERE publication_year <2010;
```

OUTPUT:


```
+-----------------+
| average_price   |
+-----------------+
|        901.6154 |
+-----------------+
1 row in set (0.01 sec)
```

IDENTIFY THE CUSTOMER(S) WHO REGISTERED IN 2023

QUERY:

```
mysql> SELECT customer_id, first_name, last_name
    -> FROM customers_dataset
    -> WHERE year(registration_date) = 2023;
```

OUTPUT:


```
+-------------+------------+------------+
| customer_id | first_name | last_name  |
+-------------+------------+------------+
| KM-17035    | Ken        | Martin     |
| MH-11140    | Mary       | Heidel     |
| LD-16630    | Lena       | Dominguez  |
| DC-17500    | Dave       | Chong      |
| DC-14560    | Doug       | Cousins    |
| MC-14755    | Michelle   | Cacioppo   |
| SB-16105    | Steven     | Brooks     |
+-------------+------------+------------+
7 rows in set (0.01 sec)
```

CALCULATE THE TOTAL NUMBER OF ORDERS PLACED IN THE DATABASE

QUERY:

```
mysql> SELECT COUNT(*) AS total_orders
    -> FROM orders_dataset;
```

FIND THE BOOK(S) WITH THE LOWEST AVAILABLE QUANTITY IN STOCK

QUERY:

```
mysql> SELECT title, available_quantity
    -> FROM books_dataset
    -> ORDER BY available_quantity ASC
    -> LIMIT 1;
```

OUTPUT:

```
+----------------------------------+--------------------+
| title                            | available_quantity |
+----------------------------------+--------------------+
| People We Meet on Vacation       |                  1 |
+----------------------------------+--------------------+
1 row in set (0.00 sec)
```

CALCULATE THE TOTAL REVENUE FOR EACH YEAR FROM 2020 TO 2022

QUERY:

```
mysql> SELECT YEAR(order_date) AS year, SUM(total_amount) AS total_revenue
    -> FROM orders_dataset
    -> WHERE YEAR(order_date) BETWEEN 2020 AND 2022
    -> GROUP BY YEAR(order_date);
```

OUTPUT:


```
+------+---------------+
| year | total_revenue |
+------+---------------+
| 2020 |        303559 |
| 2021 |        226674 |
| 2022 |        239629 |
+------+---------------+
3 rows in set (0.00 sec)
```

DETERMINE THE CUSTOMER(S) WITH THE MOST ORDERS PLACED

QUERY:

```
mysql> SELECT customers_dataset.customer_id,customers_dataset.first_name, customers_dataset.last_name,
    -> count(order_details_dataset.order_id) as order_count
    -> FROM orders_dataset JOIN order_details_dataset USING(order_id)
    -> JOIN customers_dataset USING (customer_id)
    -> GROUP BY customers_dataset.customer_id, customers_dataset.first_name, customers_dataset.last_name
    -> ORDER BY count(order_id) DESC
    -> limit 3;
```

OUTPUT:

```
+-------------+------------+------------+-------------+
| customer_id | first_name | last_name  | order_count |
+-------------+------------+------------+-------------+
| DC-17500    | Dave       | Chong      |           8 |
| DB-13270    | Deborah    | Brumfield  |           7 |
| TB-21175    | Thomas     | Boland     |           6 |
+-------------+------------+------------+-------------+
3 rows in set (0.00 sec)
```