REPORT

1. Table Creation:

The following tables were created:

- **Authors Table**: Contains information about authors, identified by an `author_id`. The columns are:
    - `author_id` (INT): Unique identifier for each author (Primary Key).
    - `author_name` (VARCHAR(50)): The name of the author.
- **Books Table**: Contains information about books, identified by a `book_id`. The columns are:
    - `book_id` (INT): Unique identifier for each book (Primary Key).
    - `title` (VARCHAR(50)): The title of the book.
    - `author_id` (INT): Foreign key referencing the `author_id` from the `Authors` table.
- **Sales Table**: Contains sales information for each book, identified by `book_id`. The columns are:
    - `book_id` (INT): Foreign key referencing the `book_id` from the `Books` table.
    - `units_sold` (INT): The number of units sold for the book.
    - `unit_price` (DECIMAL(10,2)): The price of each unit sold.

2. Data Insertion:

The following data was inserted into the tables:

- **Authors**:
    - 5 authors were added, including famous names like J.K. Rowling, George R. R. Martin, and Stephen King.
- **Books**:
    - 10 books were added, each associated with an author. For example, J.K. Rowling's books are included such as "Harry Potter and the Sorcerer's Stone" and "Harry Potter and the Chamber of Secrets".
- **Sales**:
    - 10 records of sales data for the books were added. Each record includes the number of units sold and the unit price for each book. For instance, "Harry Potter and the Sorcerer's Stone" had 100,000 units sold at a price of $19.99 per unit.

3. Queries Performed:

- **Check for Missing Values in Authors Table**:

```sql
Copy code
SELECT * FROM Authors
WHERE author_name IS NULL;
```

This query checks for missing values in the `author_name` column in the `Authors` table. Since no authors have null values in their names, this query would return an empty result.

- **Join Books with Authors**:

```sql
Copy code
SELECT Books.book_id, Books.title, Authors.author_name
FROM Books
INNER JOIN Authors ON Books.author_id = Authors.author_id;
```

This query joins the `Books` table with the `Authors` table based on the `author_id`. It returns the `book_id`, `title`, and `author_name` for each book. This gives a detailed list of books with the corresponding author's name.

- **Sum of Sales Revenue Per Book**:

```sql
Copy code
SELECT Books.title,
       SUM(Sales.units_sold * Sales.unit_price) AS total_sales_revenue
FROM Sales
INNER JOIN Books ON Sales.book_id = Books.book_id
GROUP BY Books.book_id;
```

This query calculates the total sales revenue for each book by multiplying the `units_sold` by the `unit_price` for each book. The results show the total sales revenue per book. For example, "Harry Potter and the Sorcerer's Stone" would have a revenue of 100,000 * 19.99.

- **Join Books and Sales**:

```sql
Copy code
SELECT Books.*, Sales.*
FROM Books
INNER JOIN Sales ON Sales.book_id = Books.book_id;
```

This query joins the `Books` table with the `Sales` table to display all columns from both tables, showing the full details of each book along with its sales data.