

LAB 4 SQL

Getting the data ready:

Here are two options for completing the SQL assignment:

Use the online SQL editor:

- Go to <https://www.programiz.com/sql/online-compiler/>
- Write your SQL queries in the editor to complete the assignment
- Run the queries and inspect the output

or

Use a local SQL database:

- Install and set up a local SQL database
- Create a new database
- Copy the SQL statements from the provided file and run them on your local database to create the necessary tables and data
- Open a query interface for your database
- Write your SQL queries to complete the assignment
- Run the queries and inspect the output

```
-- Create Customers Table
CREATE TABLE Customers (
    customer_id INT PRIMARY KEY,
    first_name VARCHAR(50),
    last_name VARCHAR(50),
    age INT,
    country VARCHAR(50)
);

-- Insert Sample Data into Customers Table
INSERT INTO Customers VALUES
    (1, 'John', 'Doe', 31, 'USA'),
    (2, 'Robert', 'Luna', 22, 'USA'),
    (3, 'David', 'Robinson', 22, 'UK'),
```

```

        (4, 'John', 'Reinhardt', 25, 'UK'),
        (5, 'Betty', 'Doe', 28, 'UAE');

-- Create Orders Table
CREATE TABLE Orders (
    order_id INT PRIMARY KEY,
    item VARCHAR(50),
    amount INT,
    customer_id INT,
    FOREIGN KEY (customer_id) REFERENCES Customers(customer_id)
);

-- Insert Sample Data into Orders Table
INSERT INTO Orders VALUES
    (1, 'Keyboard', 400, 4),
    (2, 'Mouse', 300, 4),
    (3, 'Monitor', 12000, 3),
    (4, 'Keyboard', 400, 1),
    (5, 'Mousepad', 250, 2);

-- Create Shippings Table
CREATE TABLE Shippings (
    shipping_id INT PRIMARY KEY,
    status VARCHAR(50),
    customer INT,
    FOREIGN KEY (customer) REFERENCES Customers(customer_id)
);

-- Insert Sample Data into Shippings Table
INSERT INTO Shippings VALUES
    (1, 'Pending', 2),
    (2, 'Pending', 4),
    (3, 'Delivered', 3),
    (4, 'Pending', 5),
    (5, 'Delivered', 1);

```

Questions

Answers should be Queries

Retrieve all customer information.

Retrieve all order details.

Retrieve all shipping details.

Find the total number of customers.

Find the average age of customers.

Find customers who have placed orders and their order details.

Retrieve customers who have not placed any orders.

Find the customer with the highest total order amount.

Retrieve the items ordered by customers from the UK.

Find the status of orders placed by customers aged 25 or below.

Submission Details

It should be a pdf with the following

- Question
- Query (answer)
- Solution Screen Shot

1 . Which track has the longest lenght ?

```
SELECT Name FROM Track WHERE Milliseconds = (SELECT MAX(Milliseconds) FROM Track);
```

```
mysql> SELECT Name FROM Track WHERE Milliseconds = (SELECT MAX(Milliseconds) FROM Track);
+-----+
| Name          |
+-----+
| Under Pressure |
+-----+
```

Deadline

Feb 16th 11:59pm