

Hands on exercise: Like the way you created the following tables and inserted the data. Please execute the below mentioned queries.

```
CREATE TABLE customers (
```

```
customer_Id INTEGER PRIMARY KEY,
```

```
first_name varchar(50) NOT NULL,
```

```
last_name varchar(50) NOT NULL,
```

```
age INTEGER not null,
```

```
country varchar (50)
```

```
);
```

```
CREATE TABLE product (
```

```
product_Id INTEGER PRIMARY KEY,
```

```
Product_Name varchar(100) NOT NULL,
```

```
product_type varchar(100) NOT NULL,
```

```
product_cost INTEGER not null
```

```
);
```

```
CREATE TABLE Order_Transaction (
```

```
order_id INTEGER PRIMARY KEY,
```

```
cust_id integer FOREIGN KEY REFERENCES customers(customer_Id),
```

```
prod_Id INTEGER FOREIGN KEY REFERENCES product(product_Id),
```

```
order_qty integer default 1 ,
```

```
order_date date
```

```
);
```

Assignments for the SQL workshop held on July 6th and 7th

1. Retrieve the ages of all customers from the USA
2. List the unique countries from which you have customers.
3. Get the names and ages of customers who are older than the average customer age
4. List all customers whose last name has more than 6 characters
5. Find the most expensive product
6. List all 'Samsung' products.
7. Calculate the average age of customers from each country
8. Find customers who have never ordered a 'Smartphone'
9. Calculate the average profit margin per product type (assuming 20% profit)

10. List all orders with customer names and product names
11. Find the top 3 countries with the most customers. (Hint: Use `COUNT`, `GROUP BY`, and `ORDER BY`)
12. List all products of type 'Laptop' and their prices in descending order.
13. List customers who have placed more than 3 orders. (Hint: Use `GROUP BY` and `HAVING`)
14. Calculate the average order quantity for each product.
15. Find the order with the highest quantity.