

#1. List all countries in South America

```
SELECT Name FROM country WHERE country.Continent = 'South America';
```

#2. Find the population of Germany

```
SELECT Population FROM country WHERE name = 'Germany';
```

#3. Retrieve all cities in the country 'Japan'

```
SELECT Name FROM city WHERE CountryCode = 'JPN';
```

#4. Find the 3 most populated countries in the 'Africa' region.

```
SELECT Name, Population FROM country WHERE Continent = 'Africa' ORDER BY Population  
DESC LIMIT 3;
```

#5. Retrieve the country and its life expectancy where the population is between 1 and 5 million.

```
SELECT Name, LifeExpectancy FROM country WHERE Population BETWEEN 1000000 AND  
5000000;
```

#6. List countries with an official language of 'French'.

```
SELECT country.Name FROM country JOIN countrylanguage ON country.Code =  
countrylanguage.CountryCode WHERE countrylanguage.Language = 'French' AND  
countrylanguage.IsOfficial = 'T';
```

#7. Retrieve all album titles by the artist 'AC/DC'.

```
SELECT Album.Title FROM Album JOIN Artist ON Album.ArtistId = Artist.ArtistId WHERE  
Artist.Name = 'AC/DC';
```

#8. Find the name and email of customers located in 'Brazil'.

```
SELECT FirstName, LastName, Email FROM Customer WHERE Country = 'Brazil';
```

#9. List all playlists in the database.

```
SELECT Name FROM Playlist;
```

#10. Find the total number of tracks in the 'Rock' genre.

```
SELECT COUNT(*) FROM Track WHERE GenreId = (SELECT GenreId FROM Genre WHERE  
Name = 'Rock');
```

#11. List all employees who report to 'Nancy Edwards'.

```
SELECT FirstName, LastName FROM Employee WHERE ReportsTo = (SELECT EmployeeId  
FROM Employee WHERE FirstName = 'Nancy' AND LastName = 'Edwards');
```

#12. Calculate the total sales per customer by summing the total amount in invoices.

```
SELECT CustomerId, SUM(Total) AS TotalSales FROM Invoice GROUP BY CustomerId;
```

## **PART 2:**

USE dgm4wg;

```
CREATE TABLE Customers (  
    CustomerID INT PRIMARY KEY,  
    FirstName VARCHAR(100),  
    LastName VARCHAR(100),  
    Email VARCHAR(100),
```

```
    PhoneNumber VARCHAR(15)
);
```

```
CREATE TABLE Products (
    ProductID INT PRIMARY KEY,
    ProductName VARCHAR(100),
    Category VARCHAR(50),
    Price DECIMAL(5, 2)
);
```

```
CREATE TABLE Orders (
    OrderID INT PRIMARY KEY,
    CustomerID INT, -- Foreign key referencing Customers table
    ProductID INT, -- Foreign key referencing Products table
    OrderDate DATE,
    Quantity INT,
    FOREIGN KEY (CustomerID) REFERENCES Customers(CustomerID),
    FOREIGN KEY (ProductID) REFERENCES Products(ProductID)
);
```

```
INSERT INTO Customers (CustomerID, FirstName, LastName, Email, PhoneNumber)
VALUES
(1, 'Luke', 'Lustig', 'luke.lustig@gmail.com', '123-456-7890'),
(2, 'Bailey', 'Wydler', 'bailey.wydler@gmail.com', '234-567-8901'),
(3, 'Casey', 'Kerrigan', 'casey.kerrigan@gmail.com', '345-678-9012'),
(4, 'Sofia', 'Todaro', 'sofia.todaro@gmail.com', '456-789-0123'),
(5, 'Emily', 'Davis', 'emily.davis@gmail.com', '567-890-1234');
```

```
INSERT INTO Products (ProductID, ProductName, Category, Price)
VALUES
(1, 'Chocolate Cake', 'Cakes', 15.99),
(2, 'Croissant', 'Pastries', 3.50),
(3, 'Bagel', 'Breads', 2.99),
(4, 'Cinnamon Roll', 'Pastries', 4.25),
(5, 'Cheesecake', 'Cakes', 18.50);
```

```
INSERT INTO Orders (OrderID, CustomerID, ProductID, OrderDate, Quantity)
VALUES
(1, 1, 1, '2024-09-08', 2),
(2, 2, 2, '2024-09-08', 5),
```

```
(3, 3, 3, '2024-09-09', 3),  
(4, 4, 4, '2024-09-10', 1),  
(5, 5, 5, '2024-09-11', 1);
```

```
SELECT FirstName, LastName  
FROM Customers;
```

```
SELECT ProductName, Price  
FROM Products;
```

```
SELECT COUNT(*) AS TotalCustomers  
FROM Customers;
```