

## Task # 6

*Scenario--Consider the Country table and Persons table that you created earlier and perform the following:*

- (1)Perform inner join, Left join, and Right join on the tables.*
- (2)List all distinct country names from both the Country and Persons tables.*
- (3)List all country names from both the Country and Persons tables, including duplicates.*
- (4)Round the ratings of all persons to the nearest integer in the Persons table.*

### 1.1—Performing Inner join

- This query retrieves records that have matching values in both the Persons and Country tables based on the Country\_Id column.

**Advantage of Inner join**—Inner join only includes the rows where a match is found in both the tables.

--Query to achieve the above advantage

```
select p.Fname,p.Lname,p.Population,p.Rating,p.Country_Id,p.Country_name,c.Area from  
Persons p
```

```
inner join Country c on c.Id=p.Country_Id;
```

### 1.2—Performing left join

- This query retrieves all records from the **Persons** table , and the matched records from the **Country** table . If no match is found , NULL values will be returned for columns from the Country Table.

**Advantage of Left join**—Left join include all then rows from the left table , even if there is no corresponding records in the right table.

--Query to achieve the above advantage

```
select p.Fname,p.Lname,p.Population,p.Rating,p.Country_Id,p.Country_name,c.Area from  
Persons p
```

```
Left join Country c on c.Id=p.Country_Id;
```

### 1.3—Performing right join

- This query retrieves records from the **Country** table, and the matched records from the **Persons** Table .If no match is found ,Null values will be returned for columns from the **Persons** Table.

**Advantage of Right join**—Right join includes all rows from the right table , even if there is no corresponding record in the left table.

--Query to achieve the above advantage

```
select p.Fname,p.Lname,p.Population,p.Rating,p.Country_Id,p.Country_name,c.Area from  
Persons p
```

```
Right join Country c on c.Id=p.Country_Id;
```

### 2—Performing Union operator to list distinct Country\_name from both the Table

- This query uses the **UNION** operator to combine country names from both tables. The **UNION** operator removes duplicates, ensuring that each country name appears only once in the final result.

**Advantage of Union Operator- Distinct** ensures that duplicate records are eliminated before combining results from both tables.

--Query to achieve above advantage

```
select distinct Country_name from Country
```

```
UNION
```

```
select Distinct Country_name from Persons;
```

3-- Performing Union All operator to list Country\_name from both the Table including Duplicates.

- This query uses UNION ALL, which combines results from both tables but does not eliminate duplicates. If a country name appears in both tables or multiple times within one table, it will be repeated in the output.

**Advantage of Union All Operator-** UNION ALL does not eliminate the duplicates. If we wish to include the duplicates in the final output from both the tables we can use Union All instead of Union that's the only basic difference between **UNION** and **UNION ALL**

--Query to achieve above advantage

```
select Country_name from Country
```

```
UNION ALL
```

```
select Country_name from Persons;
```

4--Rounding off the ratings of all persons to the nearest integer in the Persons table.

- This query rounds the ratings for each person in the Persons table to the nearest whole number using the ROUND() function.

**Advantage of ROUND expression-**The ROUND(*column\_name*, 0) expression rounds the column to desired decimal places .

--Query to achieve above advantage

```
SELECT Fname,Lname,Country_name,ROUND(Rating,0) AS RoundedRating from Persons;
```