* **Consider yourself as a System Analyst, you are required to design a database for “GIMS”, explain how database development life cycle helps in designing a database (elaborate each step with proper reason).**
* **Implement these operators/statement on a following table and submit your result in both query and screenshot form (.Docx) File as mentioned in class**
* **DDL Commands(Create database named as World & create table named as country\_information)**

1.CREATE DATABASE World ;

2.CREATE TABLE country\_information(

Code VARCHAR(10),

Name VARCHAR(25),

Continent VARCHAR(25),

Region VARCHAR(25),

SurfaceArea NUMBER(10),

IdependenceYear NUMBER(10),

papulation NUMBER(10),

LifeExpactancy NUMBER(10)

);

SELECT \* FROM countryInfo;

* **Rename table “country\_info”**

ALTER TABLE countryInformation RENAME TO countryInfo;

* **Add new column “Capital” and rename that column as “Country\_capital”**

ALTER TABLE countryInfo

ADD Capital varchar(255)

....................................

ALTER TABLE countryInfo RENAME COLUMN Capital to Country\_capital;

* **Drop column “Country\_Capital”**

ALTER TABLE countryInfo DROP COLUMN Country\_capital

* **Insert all the record given in the image**

INSERT INTO countryInfo VALUES ('ANT', 'Netherlands Antiles', 'North Amercia', 'Caribbean', 800, 0, 21700, 74.7);

INSERT INTO countryInfo VALUES ('ARE', 'UAE', 'Asia', 'Middle East', 83600 , 1971 , 2441000, 74.1);

INSERT INTO countryInfo VALUES ('ARG', 'Argentina', 'South Amercia', 'South Armenia', 2780400, 1816, 37032000, 75.1);

INSERT INTO countryInfo VALUES ('ARM', 'Armenia', 'Aisa', 'Middle East', 29800, 1991, 3520000, 66.4);

INSERT INTO ccountryInfoVALUES ('ASM', 'American Soma', 'Oceania', 'Polynesia', 199, 0, 68000, 75.1);

INSERT INTO countryInfo VALUES ('ATA', 'Antarctica', 'Antarctica' , 'Antarctica', 13120000, 0, 0, 0);

INSERT INTO countryInfo VALUES ('ATF', 'French Southern', 'Antarctica', 'Antarctica', 7780, 0, 0, 0);

INSERT INTO countryInfo VALUES ('ATG', 'Antigua and Barbuda', 'North Amercia', 'Caribbean', 442, 1981, 68000, 70.5);

INSERT INTO countryInfo VALUES ('AUS', 'Australia', 'Oceania', 'Australia and NZ', 7741220, 1901, 1888600, 79.8);

INSERT INTO countryInfo VALUES ('AUT', 'Australia', 'Europe', 'Western Europe', 83859, 1918, 8091800, 77.7);

INSERT INTO countryInfo VALUES ('AZE', 'Azerbaijan', 'Asia', 'Middle East', 86600, 1991, 7734000, 62.9);

INSERT INTO countryInfo VALUES ('Abw', 'Aruba', 'North Amercia', 'caribbean', 1993, 0, 103000, 78.4);

INSERT INTO countryInfo VALUES ('AFG', 'Afghanistan', 'Asia', ' Central Aisa', 652090, 1919, 22720000, 45.9);

INSERT INTO countryInfo VALUES ('AGO', 'Angola', 'Africa', 'Central Africa', 1246700, 1975, 12878000, 38.3);

INSERT INTO countryInfo VALUES ('ALA', 'Anguila', 'North Amercia', 'Caribbean', 96, 0, 8000, 76.1);

INSERT INTO countryInfo VALUES ('ALB', 'Albania', 'Europe', 'South Europe', 468, 1278, 78000, 83.5);

INSERT INTO countryInfo VALUES ('AND', 'Andora', 'Europe', 'South Europe', 86600, 1991, 7734000, 62.9);

* **Implement Arithmetic Operators (>, < . =) on columns**

SELECT \* FROM countryInfo

WHERE SurfaceArea > 96;

...........................

SELECT \* FROM countryInfo

WHERE SurfaceArea < 96;

............................

SEECT \* FROM countryInfo

WHERE SurfaceArea = 96;

* **Operators (and, or, not)**

SELECT \* FROM countryInfo

WHERE SurfaceArea > 96

AND

Code='ATG';

..............................

SELECT \* FROM countryInfo

WHERE SurfaceArea > 96

OR

Code='ATG';

.....................

SELECT \* FROM countryInfo

WHERE SurfaceArea > 96

Code!='ATG';

* **Implement Single Row functions (IN, Between And, Not Null)**

SELECT \* FROM countryInfo

WHERE Name IN ('ARM', 'ASM');

...........................

SELECT \* FROM countryInfo

WHERE SurfaceArea BETWEEN 90 AND 1000;

........................

SELECT \* FROM countryInfo

WHERE SurfaceArea !=0;

.......................

SELECT \* FROM countryInfo

WHERE SurfaceArea BETWEEN 90 AND 1000

AND

Code ='AGT';

* ***Implement Group functions (SUM, AVG, MAX, MIN, Count (\*), count(exp))***

SELECT AVG(SurfaceArea)

FROM countryInfo;

....................

SELECT COUNT(SurfaceArea)

FROM countryInfo;

..................................

SELECT SUM(SurfaceArea)

FROM countryInfo;

........................

SELECT MIN(SurfaceArea)

FROM countryInfo;

....................

SELECT MAX(SurfaceArea)

FROM countryInfo;

* ***Implement other SQL Clauses such as Where, group by, order by, distinct, having, wild cards***

SELECT \* FROM countryInfo

ORDER BY SurfaceArea;

..........................

SELECT \*

FROM countryInfo

WHERE SurfaceArea != 96

SELECT \* FROM countryInfo

WHERE Name LIKE '%A%';

]SELECT \* FROM countryInfo

WHERE Name LIKE 'A%';

]SELECT \* FROM countryInfo

WHERE Name LIKE '%A';

......................

SELECT DISTINCT SurfaceArea FROM countryInfo;

........................

*Country\_Information*

