#### FSDM – Database Design & SQL – SQL Project

#### - 2022F

**Student ID: C0871405** 

**Student Name: Rudhar Sharma** 

#### Question -

#### 2022W - Database Design & SQL

SQL Project - 15%

Create the database of your project using Oracle Only

Populate tables with data (5 – 10 records for each table)

This is an individual Project!

Rename at least one column in each SQL Statement

e.g CustomerName As CustomerName\_697697

- 1. Write more than 50 SQL Statements according to the following criteria
  - At least 5 SQL statements from each categories A-F (Max 8)
  - At least 5 SQL Statements from Advance Category
  - Try to create complex but meaningful queries than simple queries
  - Complex queries will get more marks

#### **Provide Screen Shots for**

- SQL Statement(s)
- Output (show only first 3 /5 records)

#### Live SQL –

#### select dob, count (dob) from student group by dob;

DOB	COUNT(DOB)
07-DEC-97	1
25-DEC-99	1
05-DEC-00	1
02-DEC-97	1
10-NOV-00	1

### select \* from student;

STUDENT_ID	ADDRESS_ID	FIRST_NAME	LAST_NAME	GUARDIAN_NAME	DOB	MOBILE	EMAIL	JOINING_DATE
1	1	Anil	Verma	Arun Verma	05-DEC-00	6478325376	anilverma@gmail.com	06-DEC-22
2	2	Micheal	Charles	Aggam Charles	10-NOV-00	7859642315	m.charles@gmail.com	06-DEC-22
3	3	Hennery	Salvadore	Ben John	25-DEC-99	6247592301	Hennery@gmail.com	06-DEC-22
4	4	Sam	Singh	Amandeep Singh	02-DEC-97	2301448953	singh.sam@gmail.com	06-DEC-22
5	5	Zoye	Alam	Aneeta Alam	07-DEC-97	7596478457	zoyeee@gmail.com	06-DEC-22

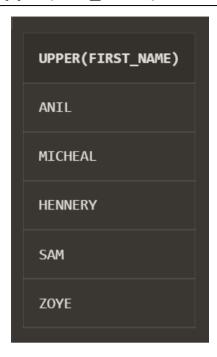
## select address\_id,count(address\_id) from student group by address\_id having address\_id = 4;



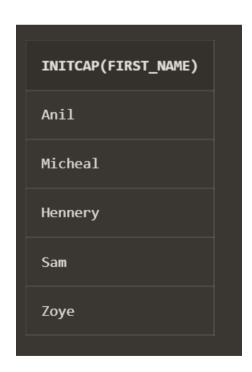
#### select lower(first\_name) from student;



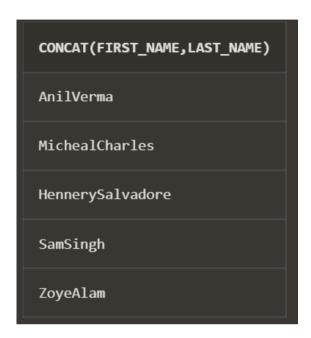
#### select upper(first\_name) from student;



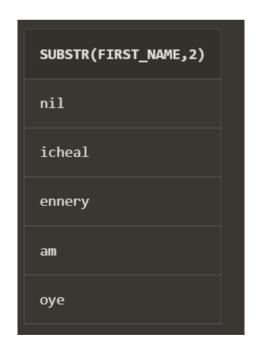
#### select INITCAP(first\_name) from student;



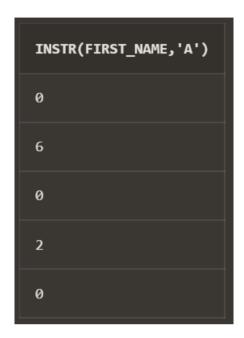
#### select CONCAT(first\_name,last\_name) from student;



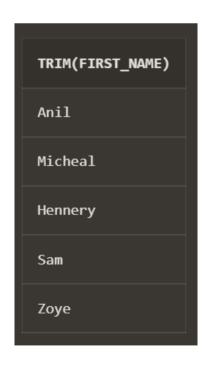
#### select SUBSTR(first\_name,2) from student;



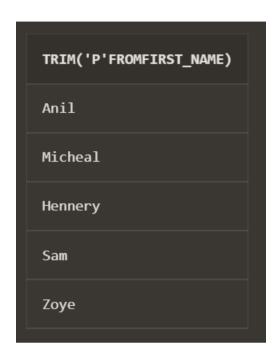
#### select INSTR(first\_name, 'a') from student;



#### select TRIM(first\_name) from student;



#### select TRIM('p' from first\_name) from student;



#### select lpad(first\_name,5,'\*') from student;



#### select ROUND(3.578) from student;



#### select ceil(3.178) from student;



#### select ceil(-3.178) from student;



select first\_name,COALESCE(email,mobile,'dosent have one') from student;

FIRST_NAME	COALESCE(EMAIL, MOBILE, 'DOSENTHAVEONE')
Anil	anilverma@gmail.com
Micheal	m.charles@gmail.com
Hennery	Hennery@gmail.com
Sam	singh.sam@gmail.com
Zoye	zoyeee@gmail.com

#### select first\_name,nvl(email,mobile) from student;

FIRST_NAME	NVL(EMAIL,MOBILE)
Anil	anilverma@gmail.com
Micheal	m.charles@gmail.com
Hennery	Hennery@gmail.com
Sam	singh.sam@gmail.com
Zoye	zoyeee@gmail.com

# SELECT LISTAGG(first\_name, ', ') WITHIN GROUP (ORDER BY first\_name) "name\_Listing" FROM student;

```
name_Listing
Anil, Hennery, Micheal, Sam, Zoye
```

#### Select student\_id, First\_name, Last\_name from STUDENT;

STUDENT_ID	FIRST_NAME	LAST_NAME
1	Anil	Verma
2	Micheal	Charles
3	Hennery	Salvadore
4	Sam	Singh
5	Zoye	Alam

## SELECT student\_id, First\_name | | " | | Last\_name AS "NAME" FROM STUDENT;

STUDENT_ID	NAME
1	AnilVerma
2	MichealCharles
3	HennerySalvadore
4	SamSingh
5	ZoyeAlam

# Select Student\_id,First\_name, mobile, email FROM STUDENT

#### WHERE Student\_id >3;

STUDENT_ID	FIRST_NAME	MOBILE	EMAIL
4	Sam	2301448953	singh.sam@gmail.com
5	Zoye	7596478457	zoyeee@gmail.com

# Select Student\_id,First\_name, mobile, email, dob FROM STUDENT WHERE dob IS NOT NULL;

STUDENT_ID	FIRST_NAME	MOBILE	EMAIL	DOB
1	Anil	6478325376	anilverma@gmail.com	05-DEC-00
2	Micheal	7859642315	m.charles@gmail.com	10-NOV-00
3	Hennery	6247592301	Hennery@gmail.com	25-DEC-99
4	Sam	2301448953	singh.sam@gmail.com	02-DEC-97
5	Zoye	7596478457	zoyeee@gmail.com	07-DEC-97

#### Select \*

#### **FROM STUDENT**

#### WHERE First\_name LIKE 'A%';

STUDENT_ID	ADDRESS_ID	FIRST_NAME	LAST_NAME	GUARDIAN_NAME	DOB	MOBILE	EMAIL	JOINING_DATE
1	1	Anil	Verma	Arun Verma	05-DEC-00	6478325376	anilverma@gmail.com	06-DEC-22

#### Select \*

#### **FROM STUDENT**

#### WHERE First\_name LIKE 'S\_%';

STUDENT_ID	ADDRESS_ID	FIRST_NAME	LAST_NAME	GUARDIAN_NAME	DOB	MOBILE	EMAIL	JOINING_DATE
4	4	Sam	Singh	Amandeep Singh	02-DEC-97	2301448953	singh.sam@gmail.com	06-DEC-22

#### **SELECT** \*

#### **FROM STUDENT**

WHERE DOB BETWEEN '01-DEC-2000' AND '31-DEC-2000';

STUDENT_ID	ADDRESS_ID	FIRST_NAME	LAST_NAME	GUARDIAN_NAME	DOB	MOBILE	EMAIL	JOINING_DATE
1	1	Anil	Verma	Arun Verma	05-DEC-00	6478325376	anilverma@gmail.com	06-DEC-22

#### SELECT\*

#### **FROM ADDRESS**

#### WHERE CITY IN ('Brampton');

ADDRESS_ID	APT_NO	STREET	СІТУ	ZIPCODE
1	15	Williams Parkway	Brampton	L3X2C1
5	3	Williams Parkway	Brampton	L3X2C2

#### Select \*

#### **FROM ADDRESS**

#### WHERE CITY IN ('Brampton','Toronto');

ADDRESS_ID	APT_NO	STREET	СІТУ	ZIPCODE
1	15	Williams Parkway	Brampton	L3X2C1
2	90	Dundas Street	Toronto	MT45TT
4	1	Young Street	Toronto	MY7T7Y
5	3	Williams Parkway	Brampton	L3X2C2

#### **SELECT** \*

#### **FROM STUDENT**

WHERE dob>'01-Nov-2000' AND Joining\_date >= '06-Dec-2022';

STUDENT_ID	ADDRESS_ID	FIRST_NAME	LAST_NAME	GUARDIAN_NAME	DOB	MOBILE	EMAIL	JOINING_DATE
	1	Anil	Verma	Arun Verma	05-DEC-00	6478325376	anilverma@gmail.com	06-DEC-22
2	2	Micheal	Charles	Aggam Charles	10-NOV-00	7859642315	m.charles@gmail.com	06-DEC-22

#### SELECT \*

#### **FROM STUDENT**

#### WHERE Student\_id>=1

ORDER BY student\_id;

STUDENT_ID	ADDRESS_ID	FIRST_NAME	LAST_NAME	GUARDIAN_NAME	DOB	MOBILE	EMAIL	JOINING_DATE
1	1	Anil	Verma	Arun Verma	05-DEC-00	6478325376	anilverma@gmail.com	06-DEC-22
2	2	Micheal	Charles	Aggam Charles	10-NOV-00	7859642315	m.charles@gmail.com	06-DEC-22
3		Hennery	Salvadore	Ben John	25-DEC-99	6247592301	Hennery@gmail.com	06-DEC-22
4	4	Sam	Singh	Amandeep Singh	02-DEC-97	2301448953	singh.sam@gmail.com	06-DEC-22
5		Zoye	Alam	Aneeta Alam	07-DEC-97	7596478457	zoyeee@gmail.com	06-DEC-22

# SELECT MIN(DOB) AS "DOB OF ELDEST STUDENT" FROM STUDENT;



# SELECT COUNT (Student\_id) FROM STUDENT;



### select \* from address;

ADDRESS_ID	APT_NO	STREET	СІТУ	ZIPCODE	
1	15	Williams Parkway	Brampton	L3X2C1	
2	90	Dundas Street	Toronto	MT45TT	
3	11	Bathurst Road	North York	M6X1J6	
4	1	Young Street	Toronto	MY7T7Y	
5	3	Williams Parkway	Brampton	L3X2C2	

### select \* from student;

STUDENT_ID	ADDRESS_ID	FIRST_NAME	LAST_NAME	GUARDIAN_NAME	DOB	MOBILE	EMAIL	JOINING_DATE
1		Anil	Verma	Arun Verma	05-DEC-00	6478325376	anilverma@gmail.com	06-DEC-22
2		Micheal	Charles	Aggam Charles	10-NOV-00	7859642315	m.charles@gmail.com	06-DEC-22
3		Hennery	Salvadore	Ben John	25-DEC-99	6247592301	Hennery@gmail.com	06-DEC-22
4	4	Sam	Singh	Amandeep Singh	02-DEC-97	2301448953	singh.sam@gmail.com	06-DEC-22
5	5	Zoye	Alam	Aneeta Alam	07-DEC-97	7596478457	zoyeee@gmail.com	06-DEC-22

#### 

STUDENT_ID	ADDRESS_ID	FIRST_NAME	LAST_NAME	GUARDIAN_NAME	DOB	MOBILE	EMAIL	JOINING_DATE	ADDRESS_ID
1		Anil	Verma	Arun Verma	05- DEC- 00	6478325376	anilverma@gmail.com	06-DEC-22	1
2		Micheal	Charles	Aggam Charles	10- NOV- 00	7859642315	m.charles@gmail.com	Ø6-DEC-22	2
3		Hennery	Salvadore	Ben John	25- DEC- 99	6247592301	Hennery@gmail.com	06-DEC-22	3
4		Sam	Singh	Amandeep Singh	02- DEC- 97	2301448953	singh.sam@gmail.com	06-DEC-22	4
5		Zoye	Alam	Aneeta Alam	07- DEC- 97	7596478457	zoyeee@gmail.com	06-DEC-22	5

#### 

STUDENT_ID	ADDRESS_ID	FIRST_NAME	LAST_NAME	GUARDIAN_NAME	DOB	MOBILE	EMAIL	JOINING_DATE	ADDRESS_ID
1		Anil	Verma	Arun Verma	05- DEC- 00	6478325376	anilverma@gmail.com	06-DEC-22	
3		Hennery	Salvadore	Ben John	25- DEC- 99	6247592301	Hennery@gmail.com	06-DEC-22	
2		Micheal	Charles	Aggam Charles	10- NOV- 00	7859642315	m.charles@gmail.com	06-DEC-22	
4		Sam	Singh	Amandeep Singh	02- DEC- 97	2301448953	singh.sam@gmail.com	06-DEC-22	4
5		Zoye	Alam	Aneeta Alam	07- DEC- 97	7596478457	zoyeee@gmail.com	06-DEC-22	

#### 

STUDENT_ID	ADDRESS_ID	FIRST_NAME	LAST_NAME	GUARDIAN_NAME	DOB	MOBILE	EMAIL	JOINING_DATE	ADDRESS_ID
1		Anil	Verma	Arun Verma	05- DEC- 00	6478325376	anilverma@gmail.com	06-DEC-22	
3		Hennery	Salvadore	Ben John	25- DEC- 99	6247592301	Hennery@gmail.com	Ø6-DEC-22	
2		Micheal	Charles	Aggam Charles	10- NOV- 00	7859642315	m.charles@gmail.com	06-DEC-22	
4		Sam	Singh	Amandeep Singh	02- DEC- 97	2301448953	singh.sam@gmail.com	06-DEC-22	4
5		Zoye	Alam	Aneeta Alam	07- DEC- 97	7596478457	zoyeee@gmail.com	Ø6-DEC-22	

#### **SELECT \* FROM STUDENT CROSS JOIN ADDRESS;**

STUDENT_ID	ADDRESS_ID	FIRST_NAME	LAST_NAME	GUARDIAN_NAME	DOB	MOBILE	EMAIL	JOINING_DATE	ADDRESS_ID
1		Anil	Verma	Arun Verma	05- DEC- 00	6478325376	anilverma@gmail.com	06-DEC-22	
1		Anil	Verma	Arun Verma	05- DEC- 00	6478325376	anilverma@gmail.com	06-DEC-22	
1		Anil	Verma	Arun Verma	05- DEC- 00	6478325376	anilverma@gmail.com	06-DEC-22	
1		Anil	Verma	Arun Verma	05- DEC- 00	6478325376	anilverma@gmail.com	06-DEC-22	4

#### 



ADDRESS_ID	FIRST_NAME
1	Anil
2	Micheal
3	Hennery
4	Sam
5	Zoye

# select address\_id,first\_name from student student1 where not EXISTS (select address\_id from student student2 where student1.address\_id = 5);

ADDRESS_ID	FIRST_NAME
1	Anil
2	Micheal
3	Hennery
4	Sam

#### SELECT \* FROM STUDENT

### JOIN ( SELECT address\_ID FROM address WHERE address\_ID < 2

## ORDER BY address\_id) SUB

### ON STUDENT\_ID = STUDENT\_ID;

STUDENT_ID	ADDRESS_ID	FIRST_NAME	LAST_NAME	GUARDIAN_NAME	DOB	MOBILE	EMAIL	JOINING_DATE	ADDRESS_ID
1	1	Anil	Verma	Arun Verma	05 - DEC - 00	6478325376	anilverma@gmail.com	06-DEC-22	1
2	2	Micheal	Charles	Aggam Charles	10- NOV- 00	7859642315	m.charles@gmail.com	06-DEC-22	1
3	3	Hennery	Salvadore	Ben John	25 - DEC - 99	6247592301	Hennery@gmail.com	06-DEC-22	1
4	4	Sam	Singh	Amandeep Singh	02 - DEC - 97	2301448953	singh.sam@gmail.com	06-DEC-22	1
5	5	Zoye	Alam	Aneeta Alam	07 - DEC - 97	7596478457	zoyeee@gmail.com	06-DEC-22	1