

EX.No:06

DATE:

SUB QUERY,TIMESTAMPS,PRIMARY KEYS,FOREIGN KEYS&IMPORTNG DATA FILE TO DATABASE

AIM:

To Write a SQL code to Perform Sub Query,Timestamp,Primarykey,Foreignkey,Importing data file to data base

SOFTWARE REQUIRE:

➤ POSTGRESQL 14

SQL CODE:

\\SUBQUERY\\

```
CREATE TABLE studentmark(NAME varchar(100),tamil int,english int,maths int,science int,social int);
```

```
INSERT INTO studentmark(NAME,tamil,english,maths,science,social)VALUES('hari',68,75,78,89,99);
```

```
INSERT INTO studentmark(NAME,tamil,english,maths,science,social)VALUES('aszar',43,56,66,21,65);
```

```
INSERT INTO studentmark(NAME,tamil,english,maths,science,social)VALUES('vishnu',89,85,75,95,89);
```

```
INSERT INTO studentmark(NAME,tamil,english,maths,science,social)VALUES('maran',80,45,65,32,78);
```

```
INSERT INTO studentmark(NAME,tamil,english,maths,science,social)VALUES('mani',77,78,98,65,32);
```

```
INSERT INTO studentmark(NAME,tamil,english,maths,science,social)VALUES('arun',92,98,56,32,78);
```

```
SELECT*FROM studentmark;
```

```
SELECT NAME, tamil, english, maths, science, social
```

```
FROM studentmark;
```

```
SELECT AVG(tamil) AS avg_tamil, AVG(english) AS avg_english, AVG(maths) AS avg_maths, AVG(science)  
AS avg_science, AVG(social) AS avg_social
```

```
FROM studentmark;
```

```
SELECT (AVG(tamil) + AVG(english) + AVG(maths) + AVG(science) + AVG(social)) / 5 AS overall_avg
```

```
FROM studentmark;
```

```
\\PRIMARYKEY\\
```

```
CREATE TABLE student_mark(NAME varchar(100)primary key,tamil INT, english INT,maths INT,science  
int,social int);
```

```
INSERT INTO  
student_mark(NAME,tamil,english,maths,science,social)VALUES('hari',68,75,78,89,99),('mani',77,78,98,  
65,32);
```

```
select*from student_mark
```

```
\\FOREIGNKEY\\
```

```
CREATE TABLE student_marks(NAME varchar(100) primary key ,tamil INT ,english INT REFERENCES  
student_mark(NAME));
```

```
\\TIMESTRAMP\\
```

```
select age(timestamp'2028-02-19',timestamp'3028-02-19');
```

```
select age(timestamp'2005-02-19');
```

```
select current_time;
```

```
select current_timestamp;
```

```
select current_timestamp(1);
```

```
select extract(century from timestamp'5000-01-01');
```

```
select extract(day from timestamp'2023-01-29');
```

```
select extract(month from timestamp'200-07-9');
```

```
select justify_days(interval'365 days');
```

```
select justify_hours(interval'504 hours');
```

```
select justify_interval(interval'12 mon - 1 hours');
```

```
\\importing datafile to databases\\
```

```
create table importing(student varchar(50),english int,tamil int,maths int,science int,social int)
```

```
copy importing from 'C:\Users\aedpu\OneDrive\Documents\Abishek 2nd year PMIST\studentmarks.csv'
```

```
delimiter ','
```

```
csv header
```

OUTPUT:

SUBQUERY:

	name character varying (100)	tamil integer	english integer	maths integer	science integer	social integer
1	hari	68	75	78	89	99
2	aszar	43	56	66	21	65
3	vishnu	89	85	75	95	89
4	maran	80	45	65	32	78
5	mani	77	78	98	65	32
6	arun	92	98	56	32	78

	avg_tamil numeric	avg_english numeric	avg_maths numeric	avg_science numeric	avg_social numeric
1	74.83333333333333	72.83333333333333	73.00000000000000	55.66666666666667	73.50000000000000

	overall_avg numeric
1	69.96666666666667

### PRIMARY KEY:

Data Output Messages Notifications							
	name [PK] character varying (100)	tamil integer	english integer	maths integer	science integer	social integer	
1	hari	68	75	78	89	99	
2	mani	77	78	98	65	32	

### FOREIGN KEY:

ERROR: Key columns "english" and "name" are of incompatible types: integer and character varying.foreign key constraint "student\_marks\_english\_fkey" cannot be implemented

ERROR: foreign key constraint "student\_marks\_english\_fkey" cannot be implemented

SQL state: 42804

Detail: Key columns "english" and "name" are of incompatible types: integer and character varying.

TIMESTAMP:

Data Output			Messages	Notifications
	justify_interval	interval		
1	11 mons 29 days 23:00:00			

IMPORT DATA FILE TO DATABASE

	name	tamil	english	maths	science	social				
	character varying (100)	integer	integer	integer	integer	integer				
1	hari	68	75	78	89	99				
2	aszar	43	56	66	21	65				
3	vishnu	89	85	75	95	89				
4	maran	80	45	65	32	78				
5	mani	77	78	98	65	32				
6	arun	92	98	56	32	78				