

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(math) AS avg_math, AVG(science) AS avg_science, AVG(social) AS avg_social

FROM studentmark;

SELECT (AVG(tamil) + AVG(english) + AVG(math) + 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	55.666666666666667	73.50000000000000

	overall_avg numeric
1	69.966666666666667

PRIMARY KEY:

Data Output Messages NOTIFICATIONS

The screenshot shows a database interface with a toolbar at the top containing icons for Data Output, Messages, Notifications, and various file operations. Below the toolbar is a table with the following data:

	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 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