

Experiment No. 1.2

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Branch: MCA - CCD

Semester: I

Subject Name: Advanced DBMS Lab

UID: 22MCC20039

Section/Group: MCD-1/ Grp B

Date of Performance: 27th Sept 22

Subject Code: 22CAP-647

1. Aim/Overview of the practical:

You are given three tables: Students, Friends and Packages. Students contains two columns: ID and Name. Friends contains two columns: ID and Friend_ID (ID of the ONLY best friend). Packages contains two columns: ID and Salary (offered salary in \$ thousands per month).

Write a query to output the names of those students whose best friends got offered a higher salary than them. Names must be ordered by the salary amount offered to the best friends. It is guaranteed that no two students got same salary offer.

2. Code for experiment/practical:

Codes for Creating Tables & Inserting Values: -

```
create table Students(ID int(10), Name varchar(30));
insert into Students values('1001', 'Rishav');
insert into Students values('1002', 'Amar');
insert into Students values('1003', 'Rishant');
insert into Students values('1004', 'Shivam');

create table Friends(ID int(10), Friend_ID varchar(30));
insert into Friends values('1001', '1004');
insert into Friends values('1002', '1003');
insert into Friends values('1003', '1004');
insert into Friends values('1004', '1001');

create table Packages(ID int(10), Salary float(30));
```

```
insert into Packages values('1001', '$30500');
insert into Packages values('1002', '$20000');
insert into Packages values('1003', '$25000');
insert into Packages values('1004', '$40000');
```

Code for Main Query: -

```
SELECT t.Name, t.Salary
FROM (
    SELECT s1.ID, s1.Name, p1.Salary, f.Friend_ID, s2.name as friend_name, p2.Salary as
friend_salary
    FROM Students s1
    JOIN Packages p1 ON s1.ID = p1.ID
    JOIN Friends f ON s1.ID = f.ID
    JOIN Students s2 ON f.Friend_ID = s2.ID
    JOIN Packages p2 ON f.Friend_ID = p2.ID
) t
WHERE t.friend_salary > t.Salary
ORDER BY friend_salary;
```

3. Result/Output/Writing Summary:

```
insert into Students values('1001', 'Rishav');
insert into Students values('1002', 'Amar');
insert into Students values('1003', 'Rishant');
insert into Students values('1004', 'Shivam');

create table Friends(ID int(10), Friend_ID varchar(30));
insert into Friends values('1001', '1004');
insert into Friends values('1002', '1003');
insert into Friends values('1003', '1004');
insert into Friends values('1004', '1001');

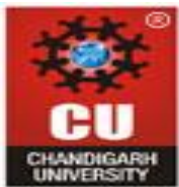
create table Packages(ID int(10), Salary float(30));
insert into Packages values('1001', '$30500');
insert into Packages values('1002', '$20000');
insert into Packages values('1003', '$25000');
insert into Packages values('1004', '$40000');

SELECT t.Name, t.Salary
FROM (
    SELECT s1.ID, s1.Name, p1.Salary, f.Friend_ID, s2.name as friend_name, p2.Salary as friend_salary
    FROM Students s1
```

Output

Name	Salary
Amar	\$20000
Rishav	\$30500
Rishant	\$25000

Learning outcomes (What I have learned):



1. Learned to create tables and inset values in it.
2. Learned to implement the join method for getting the output.

Evaluation Grid:

Sr. No.	Parameters	Marks Obtained	Maximum Marks
1.	Demonstration and Performance (Pre Lab Quiz)		5
2.	Worksheet		10
3.	Post Lab Quiz		5

***** **THE END** *****