NEPAL COLLEGE OF INFORMATION TECHNOLOGY

BALKUMARI LALITPUR

(Affiliated To Pokhara University)

SUBJECT : Database Management System

LAB REPORT # 6

TITLE : Using in-built func tions to be implemented using DML

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OBJECTIVE

To practice and implement inbuilt functions to be executed using DML

LAB EXERCISE :

➔ Creating a Database named 'lab6';

= create database lab6;

= use lab6;

OUTPUT :

```
MariaDB [(none)]> create database lab6;
Query OK, 1 row affected (0.000 sec)

MariaDB [(none)]> use lab6;
Database changed
MariaDB [lab6]>
```

➔ Creating Tables and Inserting data.

1) Works Table :

= CREATE TABLE works (employee_name varchar(50), company_name varchar(50), salary int);

INSERTING DATA :

=insert into works values ('David','First Bank Corporation',16000),('Vision','First Bank Corporation',16000),('Pradipsyste','First Bank Corporation',16000),('Hero','Small Bank Corporation',8000),('Luffy','ABC Bank Corporation',14000);

OUTPUT :

```
MariaDB [lab6]> insert into works values ('David','First Bank Corporation',16000),('Vision','First Bank Corporation',1
6000),('Pradipsyste','First Bank Corporation',16000),('Hero','Small Bank Corporation',8000),('Luffy','ABC Bank Corpora
tion',14000);
Query OK, 5 rows affected (0.011 sec)
Records: 5  Duplicates: 0  Warnings: 0

MariaDB [lab6]> select * from works;
+---------------+------------------------+--------+
| employee_name | company_name           | salary |
+---------------+------------------------+--------+
| David         | First Bank Corporation |  16000 |
| Vision        | First Bank Corporation |  16000 |
| Pradipsyste   | First Bank Corporation |  16000 |
| Hero          | Small Bank Corporation |   8000 |
| Luffy         | ABC Bank Corporation   |  14000 |
+---------------+------------------------+--------+
5 rows in set (0.000 sec)
```

1) Find those companies where the average salary is more than 12000.

= select company_name from works group by company_name having avg(salary) > 12000;

OUTPUT :

```
MariaDB [lab6]> select company_name from works group by company_name having avg(salary) > 12000;
+------------------------+
| company_name           |
+------------------------+
| ABC Bank Corporation   |
| First Bank Corporation |
+------------------------+
2 rows in set (0.037 sec)
```

2) Find those companies whose employee on a higher salary, and average than the average salary at First Bank Corporation

= select company_name from works group by company_name having avg(salary) > (select avg(salary) from works where company_name = 'First Bank Corporation');

=

OUTPUT :

```
MariaDB [lab6]> select company_name from works group by company_name having avg(salary) > (select avg(salary) from works where company_name = 'First Bank Corporation');
Empty set (0.001 sec)
```

3) Find company that has the smallest payroll.

= select company_name from works group by company_name having sum(salary) <= all(select sum(salary) from works group by company_name);

OUTPUT :

```
MariaDB [lab6]>  select company_name from works group by company_name having sum(salary) <= all(select sum(salary) from works  group by company_name);
+----------------------+
| company_name         |
+----------------------+
| Small Bank Corporation |
+----------------------+
1 row in set (0.001 sec)
```

4) find those companies who have minimum 3 employees

= select company_name from works group by company_name having count(*) >=3;

OUTPUT:

```
MariaDB [lab6]> select company_name from works group by company_name having count(*) >=3;
+------------------------+
| company_name           |
+------------------------+
| First Bank Corporation |
+------------------------+
1 row in set (0.001 sec)
```