

FINAL EXAM
Academic Year 2019 – 2020 /Even Semester (20192)

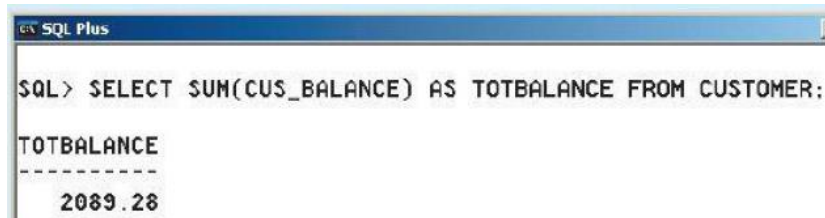
Subject	: Database System
Lecturer	: R. B. Wahyu
Study Program	: Information Technology
Due Date	: April 27 2019
Time	: 13.00 – 15.30

For this EXAM you have to give the name of your file as follows: **YourClass YourName Final** (ex: **IT2 Colin Final**).

Question 1: (based on your individual group assignment) 40 Marks

- You have created **Database in the group** and insert data into the tables;
- As I told you to create your own data so every student should have unique data. So all of you will have different data;
- For all Queries you have to write down the query **IN TEXT** and the **dump screen** as follow:

SQL> SELECT SUM(CUST_BALANCE) AS TOTALBALANCE FROM CUSTOMER (INSTRUCTION).



```
SQL Plus
SQL> SELECT SUM(CUS_BALANCE) AS TOTBALANCE FROM CUSTOMER;
TOTBALANCE
-----
2089.28
```

However if **you think** you do not have enough data to run the query successfully then you can **add more data**:

1. **SELECT * FROM** tablename (choose any table that has numeric value);
2. **Multiply** values of a column in the table where the table has numeric values with either of **11, 21, 31, 13, 23, 33, 17, 27, 37** (every body in the group choose **one** of the values);
3. **SELECT * FROM** tablename and show the result of update (the table that you have **updated/multiply** the value (question2));
4. **SELECT * FROM** tablename using WHERE **conditionlist** (any of: *less than; equal, greater than and not equal*) for numerical values;

5. Perform a query that has a subquery that use **AVG** value (for the column that has been **Multiply**) as the condition of the subquery.

Question 2:

All of you must be part of a family. So please design database for a **FAMILY ACTIVITY** system that at least has 4 *entities/relationships* involved. The database should record the names of your *greater* family (your parents, grands, uncles/aunties/siblings), their *activities*, and the *services* that they received (for example your uncle go a gymnastic at least twice a week or watch movies etc...) (60 Marks).

To answer the following questions i.e. 2.1 and 2.2 you use **your paper** and then scan/photo them and send them to ecampus.

1. Please determine the entities/tables and their attributes for each entity and for each table, identify the primary key and the foreign key(s). Create a Crow's Foot ERD for the database;
2. All the tables should conform into **3NF** show by **Data dependency diagram**.

To answer the following questions i.e. 2.3,, 2.9 use **computer** and create the **database** and **record/print** screen the activities.

3. Create all the required tables in a database;
4. Insert the appropriate data for each table;
5. **SELECT * FROM** tablename (choose any table that has numeric value);
6. **Multiply** values of a column in the table where the table has numeric values with value of 11;
7. **SELECT * FROM** tablename (the table that you have **updated/multiply** any value (question2));
8. **SELECT * FROM** tablename using WHERE **conditionlist**: (any of: *less than; equal, greater than and not equal*) for numerical values;
9. Perform a query that has a subquery that use **MIN** value (for the column that has been **Multiply**) as the condition of the subquery.

Good luck