

## PL/SQL assignment II

### SQL COMMANDS

#### SCRIPTS USED TO CREATE TABLES

i. create table clients(id int PRIMARY KEY auto\_increment, clientName varchar(15), contactemail varchar(15), contactphone varchar(15), address varchar(30));

ii. create table employees(id int PRIMARY KEY auto\_increment, first\_name varchar(15), last\_name varchar(15), position varchar(10), email varchar(15), phone\_number varchar(15), salary varchar(20));

iii. create table projects(id int PRIMARY KEY auto\_increment, projectName varchar(15), start\_date varchar(15), end\_date varchar(15), budget varchar(15), client\_id int, location varchar(30), FOREIGN KEY (client\_id) REFERENCES clients(id));

iv. create table tasks(id int PRIMARY KEY auto\_increment, description varchar(15), start\_date varchar(10), end\_date varchar(10), project\_id int, employee\_id int, FOREIGN KEY (project\_id) REFERENCES projects(id), FOREIGN KEY (employee\_id) REFERENCES employees(id));

v. create table construction\_materials(id int PRIMARY KEY auto\_increment, name varchar(30), quantity varchar(30), unit\_price varchar(30), task\_id int, FOREIGN KEY (task\_id) REFERENCES tasks(id));

vi. create table employee\_status(employee\_id int, status, FOREIGN KEY (employee\_id) REFERENCES employees(id));

## SCRIPTS USED TO add records to tables

- i. insert into clients VALUES (2, 'CHUK\_hospital', 'CHUK@gmail.com', '0788777766', 'Nyarugenge' );
- ii. insert into projects VALUES (2, 'Modern high-technology research laboratories construction', '2024-05-01', '2025-02-01', '2,000,000 USD', 2 );
- iii. insert into employees VALUES (15, 'Kabano', 'Malick', 'laborer', 'kabs@gmail.com', '0788456321', '200000RWF', );
- iv. insert into tasks VALUES (11, 'ceiling', '2024-05-01', '2024-12-01', 8, 3);
- v. insert into construction\_materials VALUES (1, 'cement sacks', '50 sacks', '15000RWF', 1);

### ➤ The SQL command used to illustrate how table joins work

1. select employees.id as employee\_id, concat(employees.first\_name, ' ', employees.last\_name) as employee\_full\_name, tasks.description, projects.projectname from employees INNER JOIN tasks ON employees.id=tasks.employee\_id INNER JOIN projects ON projects.id=tasks.project\_id;
2. select employees.id as employee\_id, concat(employees.first\_name, ' ', employees.last\_name) as employee\_full\_name, tasks.description, projects.projectname, clients.clientname from employees INNER JOIN tasks ON employees.id=tasks.employee\_id INNER JOIN projects ON projects.id=tasks.project\_id INNER JOIN clients ON clients.id=projects.client\_id;

➤ SQL command used to illustrate how delete works

```
mysql> delete from employees WHERE id=17;
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```
Query OK, 1 row affected (0.00 sec)
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