

# COMP810 - Data Warehousing and Big Data

Lab 5: SQL DDL commands

After completing this lesson, you should be able to do the following:

- Promote understanding of table creation.
- Promote understanding of table relationships and referential integrity.

#### Task 1:

1- Create a table name **student** with the following attributes

Name	Null	Туре
Student_no (PK)		Number (4)
Student_name	Not null	Varchar2 (20)
Student_address		Varchar2 (50)

### 2- Create a table name *course* with the following attributes

Name	Null	Туре	
Course_no (PK)		Number (2)	
Course_name	Not Null	Varchar2 (20)	
Course_details		Varchar2 (50)	

### 3- Create a table name *grade* with the following attributes

Name	Null	Туре	
Student_no (PK) (FK)		Number (4)	
Course_no (PK) (FK)		Number (2)	
Grade	Not null	Number (3)	

Note that "grade" table contain a composite primary key of (student\_no, course\_no). However, each of these attributes "individually" is a foreign key.

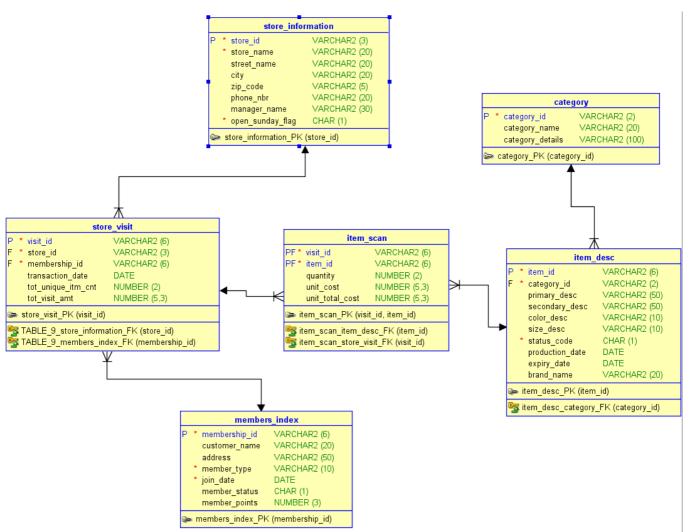
4- Identify the relationship type (1:1, 1:M, M:N) among the three tables above and create the necessary constraints to join them.



# COMP810 - Data Warehousing and Big Data

### Lab 5: SQL DDL commands

Task 2: Map the given conceptual model into internal model using CREATE and ALTER commands. Apply all foreign keys using ALTER command.



- \* → Not Null Constraint
- P → Primary key
- F → Foreign key