Week 02

* NoSQL Database Management System – i.e. MongoDB, etc.
* Pl/SQL
* 3 Different SQL functions in real life:
  + DDL (Data definition language)
    - CREATE
  + DML (Data manipulation language)
    - UPDATE, ALTER, DELETE, INSERT
  + DCL (Data Control Language)
* Schema is the description of database objects
* CREATE SCHEMA AUTHORIZATION
  + Giving an authorization to a specific database object
* If it is NOT NULL and UNIQUE, it’s a candidate of a PRIMARY KEY
* CHECK: validate data if it is in a specific range
* INDEX is for accelerate the search process (jump directly to targeted row)
  + It is not recommended if the table is frequently updated
  + However, it is recommended for reading table.
* VIEW: different view toward data for users
* DELETE: delete data in the table, however, table structure will be still remained
* DROP: delete data and structure of a table as well.
* VARCHAR and VARCHAR2 are the same
* INT and INTEGER are the same
* 3 ways of inserting data
  + Specify column name
  + Not specify column name
  + Select specific column
* Use single quotation marks for VARCHAR, CHAR, DATE.
* When we aggregate function, we use GROUP BY instead of ORDER BY.
* ORDER BY is just ascending and descending
* Conceptual design – visual representative of the database design.
* ER Diagram (Gliffy.com)
  + Bold – Not Null
  + Underline – unique
  + Italic – Foreign key
  + Bold and Underline – Primary key
  + Nothing – Optional

create table STUDENT (

Student\_ID int primary key,

SName varchar2(15) not null,

DOB date,

Department\_ID int not null)

insert into STUDENT (Student\_ID, SName, DOB, Department\_ID)

values (1111, 'Asem', '1989-AUG-27', 123);

insert into STUDENT (Student\_ID, SName, DOB, Department\_ID)

values (2222, 'Alex', '1989-08-19', 345);

insert into STUDENT

values (4444, 'Tarandeep', '2001-09-14', 789);

select \* from student;

select SName from student

where student\_id=2222;

update student

set student\_id = 3333

where department\_id = 345;

delete student;

commit;