**INFT1105-04 Winter 2024 – Inclass 04 Exercise**

**Provide a short 1-2 sentence answer to each question,   
and we will discuss the answers in class.**

1. What is SQLSERVER?  
   SQL server is a DBMS system that allows you to store, manage and retrieve data . It is a feature that includes scalability and security.

1. What is SSMS?

SQL server management studio . in this application we configurate , manage the components.

1. What is SQL?

SQL ( structured query language) is a data manipulation language (DML) that includes inserting, updating, delete, and many more. Furthermore, it is a definition language (DDL) that includes commands to create database.

1. What are tables in a database?

The table is the basic building block of database design. It helps to normalization and reduce data redundancy ir hold fields such as primary key , foreign keys.

1. What are entities in tables?

An entity is an object of interest to the end user. The entities are represented by a rectangle that contains the entity name ,and noun is usually written in all capital letters.

1. What are the attributes of entities?

Attributes are characteristics of entities. For example, entity includes the attributes STU\_LNAME, STU\_FNAME, and STU\_INTIAL.

1. What is the purpose of a primary key in a table?

The main purpose of a primary key is to provide a unique identity for an entitiy in a table.so that there will data redundancy and can be retrieve and identified .

1. What is the purpose of a foreign key in a table?

The purpose of a foreign key is to it creates the relation between databases.

1. What is a composite key for a table?

A composite key is two or more entities merge to make and unique identifier.

1. What is the purpose of a database ERD?

The purpose of ERD (entity relationship diagram) is to visually help structure the database..

1. What are the advantages of a Hierarchical database design?

The advatnages of HDD are rules and guidelines improves performance of the system , simplicity provides a way to efficiently retrieve data.

1. What are the disadvantages of a Relational database design?  
     
   complexity and managing data redundancy or duplicate overhead cost.
2. What are relationships in a database design, and what types can they be?  
   is the association between two tables. Types can be one to one , many to many , many to one
3. What is a data dictionary used for?

The meta data , it is the data of the data, helps to define the data.

1. What are business rules?

Constraints and restriction that a business places

1. What are the four DML statements,   
   and what is the basic syntax of each   
   (keywords, order of parts, required items, etc.)?

The four DML statements are – insert, select, delete and update.

1. List four functions that can be used in SQL statements,   
   and provide one example in an SQL statement.

ADDDATE

ISNULL

ROUND

GETDATE

1. What is a recursive relationship?

Is the data base within a table related to itself so it’s table that has attribute and that attributes are related to themselves.

TWITCH

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