

### BSc (Hons) in Information Technology - Year 1

#### Lab Sheet 1

#### IT1090 - Information Systems and Data Modeling

**Objective**: At the end of this lab session you will get a basic knowledge about the SQL Server, its working environment, usage of its components and you will be able to write a simple select query for a single table and select some rows.

# Introduction

### Section 1

Here you will obtain a basic understanding of the Database and the Database Management System

- a. What is a database? A database is an organized collection of structured information, or data, typically stored electronically in a computer system. A database is usually controlled by a database management system (DBMS).
- Give some real time examples of the existing databases used by different companies in Sri Lanka.
- c. What is the uniqueness that we can find in a database?
- d. When do we need a database?
- e. What is a Database Management System? A database management system (DBMS) is a software tool that makes it possible to organize data in a database. The standard acronym for database management system is DBMS, so you will often see this instead of the full name.
- f. What are the DBMS types available?

Relational database. Object oriented database. Hierarchical database. Network database.

g. Is implementing a database be a good solution for all the places that deal with data?



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# Section 2

 Let's download the SQL Server software by using the below link and after that install the software.

https://go.microsoft.com/fwlink/?linkid=866658

- 2. Starts the SQL Server.
  - a. Run a simple select query and learn how to run it. Also, find where the result is displayed.