ST. XAVIER’S COLLEGE

**Maitighar,Kathmandu**

**(Affiliated to Tribhuvan University)**



**Database Management System**

**Lab Assignment #**

**Submitted By**

Ajita Khatiwada

B.Sc. CSIT

Year II/IV Semester

013BSCIT004

**Submitted To**

Er. Sanjay Kumar Yadav

Lecturer,

Department of Computer Science

St. Xavier’s College

Maitighar, Kathmandu

**Submitted On**

September 27, 2015

4.2 data definition language

4.2.1 Domain type in SQL

4.2.2 Schema definition in SQL

4.3 Data Manipulation language

4.3.1 the select clause

4.3.2 the where clause

4.3.3the from clause

4.3.4 the rename operation

4.3.5 tuple variable

4.3.6 string operations

4.3.7 ordering the display of tuples

4.3.8 duplicate tuples

4.2.1 Domain type in SQL

* **char**(n) (or **character**(n)): fixed-length character string, with user-specified length.
* **varchar**(n) (or **character varying**): variable-length character string, with user-specified maximum length.
* **int** or **integer**: an integer (length is machine-dependent).
* **smallint**: a small integer (length is machine-dependent).
* **numeric**(*p, d*): a fixed-point number with user-specified precision, consists of *p* digits (plus a sign) and *d* of *p* digits are to the right of the decimal point. E.g., **numeric**(*3, 1*) allows 44.5 to be stored exactly but not 444.5.
* **real** or **double precision**: floating-point or double-precision floating-point numbers, with machine-dependent precision.
* **float**(n): floating-point, with user-specified precision of at least *n* digits.
* **date**: a calendar date, containing four digit year, month, and day of the month.
* **time**: the time of the day in hours, minutes, and seconds[2].

4.3 Data Manipulation language

The Data Manipulation Language (DML) is used to retrieve, insert and modify database information.

**Select operation :**

The SELECT command is the most commonly used command in SQL. It allows database users to retrieve the specific information they desire from an operational database

Example : **SELECT** name **FROM**  personal\_info **WHERE** salary > $50000[1].

4.3.1 The select clause

Select clause is used to choose the fields to be displayed.Like in example above **select name** is used that means out of all the tuples only the name of the person is to be displayed .

4.3.2 The from clause

From clause is used to find the location from where the tuples are to be selected .It is usally the table name to be selected. In the example above personnel info is the table from where the name is selected

4.3.3 the where clause

Where clause specifies the condition of the tuple selection. In example above,only the name having salary greater than 5000 is only displayed .

4.3.4 the rename operation

Reference :

[1] <http://databases.about.com/od/sql/a/sqlfundamentals_3.htm,september> 27

[2]” <http://www.cs.sfu.ca/CourseCentral/354/zaiane/material/notes/Chapter4/node31.html”,september> 27