Module/lab Session-1

Object:

* Creation of User in Database (Oracle-11g) and Grant Permission
* Creation of Table and insertion of Data into it.
* Types of SQL – Statements.

Content:

1. How to create a user in oracle 11g, and granting permissions

Steps

* Create user <username> identified by <password>;
* Grant connect, resource, DBA to <username>;
* Grant create session to <username> with admin option;
* Grant unlimited tablespace to <username>;

Or

* Create user <username> identified by <password> default tablespace users temporary table space temp;
* Grant connect to <username> identified by <password> ;
* Alter user <username> quota unlimited on users;
* Grant create table to username;

2. SQL- Create table syntax.

Create table syntax

Create table table\_name

(Column\_name1 data\_type(size),

Column\_name2 data\_type(size),

Column\_name3 data\_type(size),

… …

);

Following is an example, which creates a customers table with ID as primary as primary key and NOT NULL are the constraints showing that these fields cannot be NULL while creating records in this table;

Create table customer (

ID INT NOTNULL,

Name varchar (20) NOTNULL,

Age Int NOTNULL,

Address char (25),

Salary decimal (18,2),

Primary key (ID));

// Screen short to be placed

SQL> DESC customers;

// Screen short to be placed

String types:

* Data Type
* Char (n): fixed width character string [Max 8,000 characters]
* Varchar (n): variable width character string [Max 8,000 characters]
* Text: variable width character string max 2GB of text data
* Bit, allows 0,1 or NULL
* Binary (n), fixed width binary string, max 8000 bytes

Number Types:

* Int: Allows whole number range -2,147,483,648 to 2,147,483,648
* Decimal (P, S): The P parameter indicates the maximum total number of digits that can be stored. P ranges from1 to 38, default is 18. The S parameter indicates the max number of digits stored to the right of the decimal point. S must be a value from 0 to P. Default value is 0.
* Date: Store a date only. From January 1,0001 to December 31,9999.
* Time: Store a time only to an accuracy of 100 Nano seconds

Alter Table:

Alter table table-name add primary key (P\_ID);

Types of SQL-statements.

* Data Definition Language (DDL): Statements are used to define the database structure or schema. Some example of DDL statement are
  + Create
  + Alter
  + Drop
  + Truncate
  + Comment
  + Rename
* Data Manipulation Language (DML): Some example of DML statement are
  + Select
  + Insert
  + Update
  + Delete
* Transaction Control statements: Transaction control statement manage changes made by DML statements. The transaction control statements are
  + Commit
  + Rollback
  + Save point
  + Set transaction
* Session Control Statement: Session control statement dynamically manages the properties of a user session. These statements do not implicity commit the current transaction
  + ALTER SESSION
  + SET ROLE