Database Management System (BE03000091)

Experiment No: 1

To study DDL-create and DML-insert commands.
Create tables and insert data as shown below.
Perform queries on created tables as given in the practical list.
Date:

Competency and Practical Skills: programming and database commands

Relevant CO: CO1,CO3
Objectives: (a) To create table using DDL command.
(b) To insert data in table using DML command.
(c) To use select command for accessing data from tables(comparison based queries)
Equipment/Instruments: Personal Computer, MySQL

Explanation:
To study DDL-create and DML-insert commands. Create tables and insert data as shown below. Perform following queries on created tables,

1. Describe deposit, branch.
2. Describe borrow, customers.
3. List all data from table DEPOSIT.
4. List all data from table BORROW.
5. List all data from table CUSTOMERS.
6. List all data from table BRANCH.
7. Give account no and amount of depositors.
8. Give name of depositors having amount greater than 4000.
9. Give name of customers who opened account after date '1-12-96'.

Create tables according to the following definition.

CREATE TABLE **DEPOSIT** (ACTNO VARCHAR(5) ,CNAME VARCHAR(18) , BNAME VARCHAR(18) , AMOUNT FLOAT,ADATE DATE);

CREATE TABLE **BRANCH**(BNAME VARCHAR(18),CITYVARCHAR(18));

CREATE TABLE **CUSTOMERS**(CNAME VARCHAR(19), CITY VARCHAR(18));

CREATE TABLE **BORROW**(LOANNO VARCHAR(5), CNAME VARCHAR(18), BNAME VARCHAR(18), AMOUNT FLOAT);

Insert the data as shown below. [Date format for MYSQL : 'YYYY-MM-DD']

DEPOSIT

ACTNO	CNAME	BNAME	AMOUNT	ADATE
100	ANIL	VRCE	1000.00	1-MAR-95
101	SUNIL	AJNI	5000.00	4-JAN-96
102	MEHUL	KAROLBAGH	3500.00	17-NOV-95
104	MADHURI	CHANDI	1200.00	17-DEC-95
105	PRMOD	M.G.ROAD	3000.00	27-MAR-96
106	SANDIP	ANDHERI	2000.00	31-MAR-96
107	SHIVANI	VIRAR	1000.00	5-SEP-95
108	KRANTI	NEHRU PLACE	5000.00	2-JUL-95
109	MINU	POWAI	7000.00	10-AUG-95

[Table 1.1]

Database Management System (BE03000091)

BRANCH

BNAME	CITY
VRCE	NAGPUR
AJNI	NAGPUR
KAROLBAGH	DELHI
CHANDI	DELHI
DHARAMPETH	NAGPUR
M.G.ROAD	BANGLORE
ANDHERI	BOMBAY
VIRAR	BOMBAY
NEHRU PLACE	DELHI
POWAI	BOMBAY

[Table 1.2]

CUSTOMERS

CNAME	CITY
ANIL	CALCUTTA
SUNIL	DELHI
MEHUL	BARODA
MANDAR	PATNA
MADHURI	NAGPUR
PRAMOD	NAGPUR
SANDIP	SURAT
SHIVANI	BOMBAY
KRANTI	BOMBAY
NAREN	BOMBAY

[Table 1.3]

BORROW

LOANNO	CNAME	BNAME	AMOUNT
201	ANIL	VRCE	1000.00
206	MEHUL	AJNI	5000.00
311	SUNIL	DHARAMPETH	3000.00
321	MADHURI	ANDHERI	2000.00
375	PRMOD	VIRAR	8000.00
481	KRANTI	NEHRU PLACE	3000.00

[Table 1.4]

Database Management System (BE03000091)

Safety and necessary Precautions:

1) Make sure the database server is started
2) Login with correct user ID and password in oracle.

Procedure:

1. Get MySQL prompt
2. Login with correct userID and password
3. Ensure commit after inserting records in table/ set auto commit ON

Observations:

//Put Program along with Output of the program

Conclusion:

Quiz:

1) List all datatypes used to create a table column in oracle.
2) What is primary key?
3) Draw architecture of DBMS.

Suggested Reference:

1. "Understanding SQL", Martin Gruber, BPB
2. **"SQL- PL/SQL", Ivan bayros**

Rubric wise marks obtained:

Knowledge of subject (2)		Programming Skill		Team work (2)		Communication Skill (2)		Ethics(2)	
Good (2)	Average (1)	Good (2)	Average (1)	Good (2)	Satisfactory (1)	Good (2)	Satisfactory (1)	Good (2)	Average (1)

Rubrics	**1**	**2**	**3**	**4**	**5**	**Total**
Marks						

Experiment No: 2

Perform queries on created tables as given in the practical list.

To study DDL-create and DML-insert commands.
Create tables and insert data as shown.
Date:

Competency and Practical Skills: run DML and DDL commands in SQL
Relevant CO: CO1, CO3
Objectives: (a) To create table using DDL command.
(b) To insert data in table using DML command.
(c) To use select command for accessing data from tables (matching regular expression using like predicate)..
Equipment/Instruments: Personal Computer, MySQL

Explanation:

Create tables and insert data as shown below.
Perform following queries ,

1. Retrieve all data from **employee, jobs and deposit.**
2. Give details of account no. and deposited rupees of customers having account opened between dates **01-01-06 and 25-07-06**.
3. Display all jobs with minimum salary is greater than 4000.
4. Display name and salary of employee whose department no is 20. Give alias name to name of employee.
5. Display employee no, name and department details of those employee whose department lies **in(10,20)**

To study various options of LIKE predicate

1. Display all employee whose name start with 'A' and third character is ' 'a'.
2. Display name, number and salary of those employees whose name is 5 characters long and first three characters are 'Ani'.
3. Display the non-null values of employees and also employee name second character should be 'n' and string should be 5 character long.
4. Display the null values of employee and also employee name's third character should be 'a'.
5. What will be output if you are giving LIKE predicate as '%_%' ESCAPE '\'

Create Table Job (job_id, job_title, min_sal, max_sal)

COLUMN NAME	DATA TYPE
job_id	Varchar(15)
job_title	Varchar(30)
min_sal	Float
max_sal	Float

[Table 2.1]

Create table Employee (emp_no, emp_name, emp_sal, emp_comm, dept_no)

COLUMN NAME	DATA TYPE
emp_no	int
emp_name	Varchar(30)
emp_sal	Float
emp_comm	Float
dept_no	int

[Table 2.2]

Create table deposit(a_no,cname,bname,amount,a_date).

COLUMN NAME	DATA TYPE
a_no	Varchar(5)
cname	Varchar (15)
bname	Varchar(10)
amount	float
a_date	Date

[Table 2.3]

Create table borrow(loanno,cname,bname,amount).

COLUMN NAME	DATA TYPE
loanno	Varchar(5)
cname	Varchar(15)
bname	Varchar(10)
amount	Varchar(7,2)

[Table 2.4]

Insert following values in the table **Employee**.

emp_n	emp_name	emp_sal	emp_comm	dept _no
101	Smith	800		20
102	Snehal	1600	300	25
103	Adama	1100	0	20
104	Aman	3000		15
105	Anita	5000	50,000	10
106	Sneha	2450	24,500	10
107	Anamika	2975		30

[Table 2.5]

Insert following values in the table j**ob**.

job_id	job_name	min_sal	max_sal
IT_PROG	Programmer	4000	10000
MK_MGR	Marketing manager	9000	15000
FI_MGR	Finance manager	8200	12000
FI_ACC	Account	4200	9000
LEC	Lecturer	6000	17000
COMP_OP	Computer Operator	1500	3000

[Table 2.6]

Insert following values in the table **deposit**.[For Mysql use date format 'YYYY-MM-DD']

A_no	Cname	Bname	Amount	Date
101	Anil	andheri	7000	01-jan-06
102	Sunil	virar	5000	15-jul-06
103	Jay	villeparle	6500	12-mar-06
104	Vijay	andheri	8000	17-sep-06
105	Keyur	dadar	7500	19-nov-06
106	Mayor	borivali	5500	21-dec-06

[Table 2.7]

Safety and necessary Precautions:

1) Make sure the database server is started
2) Login with correct user ID and password in oracle.

Procedure:

1. Get My SQL prompt
2. Login with correct userID and password
3. Ensure commit after inserting records in table/ set auto commit ON

Observations:

//Put Program along with Output of the program

Conclusion:

Quiz:

1. Define data and information.
2. Give syntax of insert command.
3. How can we create a table from existing table? Give example..

Suggested Reference:

1. "Understanding SQL", Martin Gruber, BPB
2. "SQL- PL/SQL", Ivan bayros

References used by the students:

Rubric wise marks obtained:

Knowledge of subject (2)		Programming Skill		Team work (2)		Communication Skill (2)		Ethics(2)	
Good (2)	Average (1)	Good (2)	Average (1)	Good (2)	Satisfactory (1)	Good (2)	Satisfactory (1)	Good (2)	Average (1)

Rubrics	**1**	**2**	**3**	**4**	**5**	**Total**
Marks						