

DATABASE MANAGEMENT SYSTEM

(01CE2302)

Department of Computer Engineering

3rd Semester

Lab Manual

(July-Dec 2023)

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Practical 1

Aim: Introduction to RDBMS and APEX Login.

Introduction: RDBMS stands for Relational Data Base Management Systems. It is basically a program that allows us to create, delete, and update a relational database. Relational Database is a database system that stores and retrieves data in a tabular format organized in the form of rows and columns. It is a smaller subset of DBMS which was designed by E.F Codd in the 1970s. The major DBMS like SQL, My-SQL, ORACLE are all based on the principles of relational DBMS.

Relational DBMS owes its foundation to the fact that the values of each table are related to others. It has the capability to handle larger magnitudes of data and simulate queries easily.

Difference:

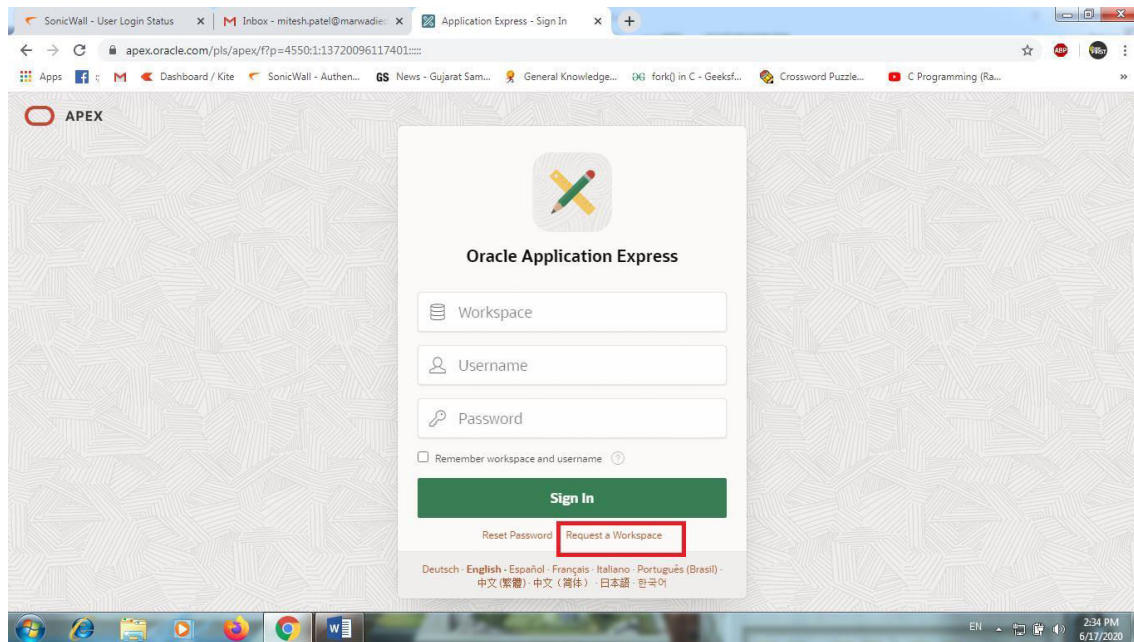
RDBMS	DBMS
DBMS stores data as file.	RDBMS stores data in tabular form.
Data elements need to access individually.	Multiple data elements can be accessed at the same time.
No relationship between data.	Data is stored in the form of tables which are related to each other.
Normalization is not present	Normalization is present.
DBMS does not support distributed database.	RDBMS supports distributed database.

It deals with small quantity of data.	It deals with large amount of data
Data redundancy is common in this model.	Keys and indexes do not allow Data redundancy.
It is used for small organization and deal with small data.	It is used to handle large amount of data.
Not all Codd rules are satisfied.	All 12 Codd rules are satisfied.
Security is less .	More security measures provided.
It supports single user.	It supports multiple users.
Data fetching is slower for the large amount of data.	Data fetching is fast because of relational approach.
The data in a DBMS is subject to low security levels with regards to data manipulation.	There exists multiple levels of data security in a RDBMS.
Low software and hardware necessities.	Higher software and hardware necessity.
Examples: XML, Window Registry, Forxpro, dbaseIIIplus etc.	Examples: MySQL, PostgreSQL, SQL Server, Oracle, Microsoft Access etc.

APEX login:

Step 1: <https://apex.oracle.com/pls/apex/>

Step 2: Click on Request a workspace.

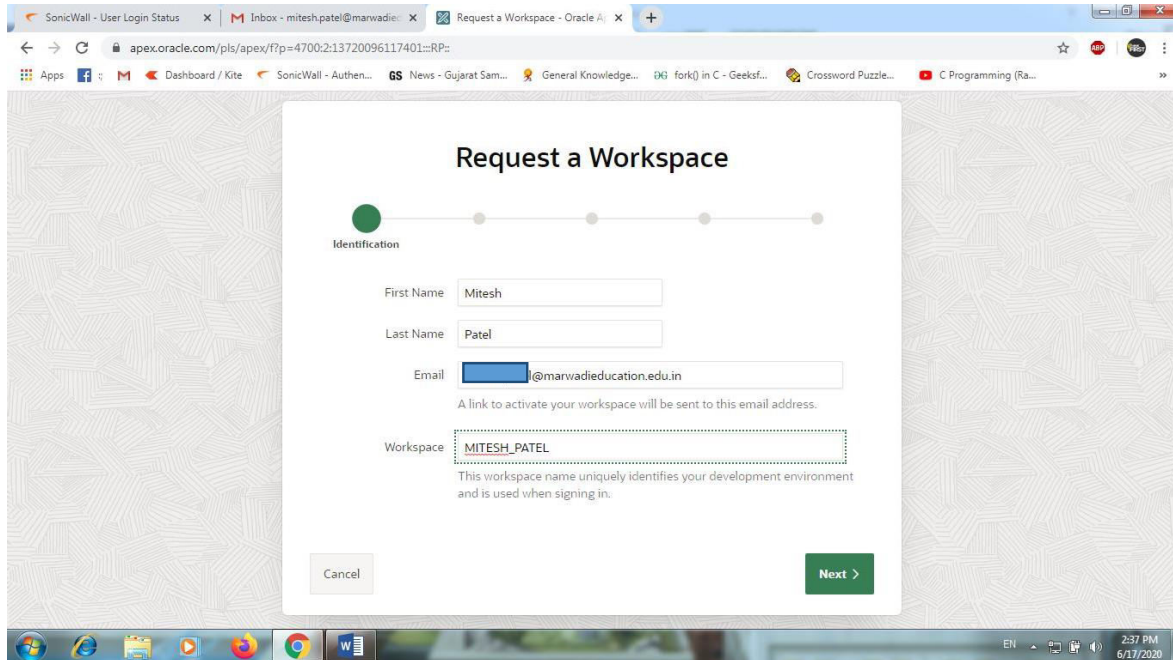


Step 3: Fill all the required details carefully like: First Name: Your name(ex. Mitesh)

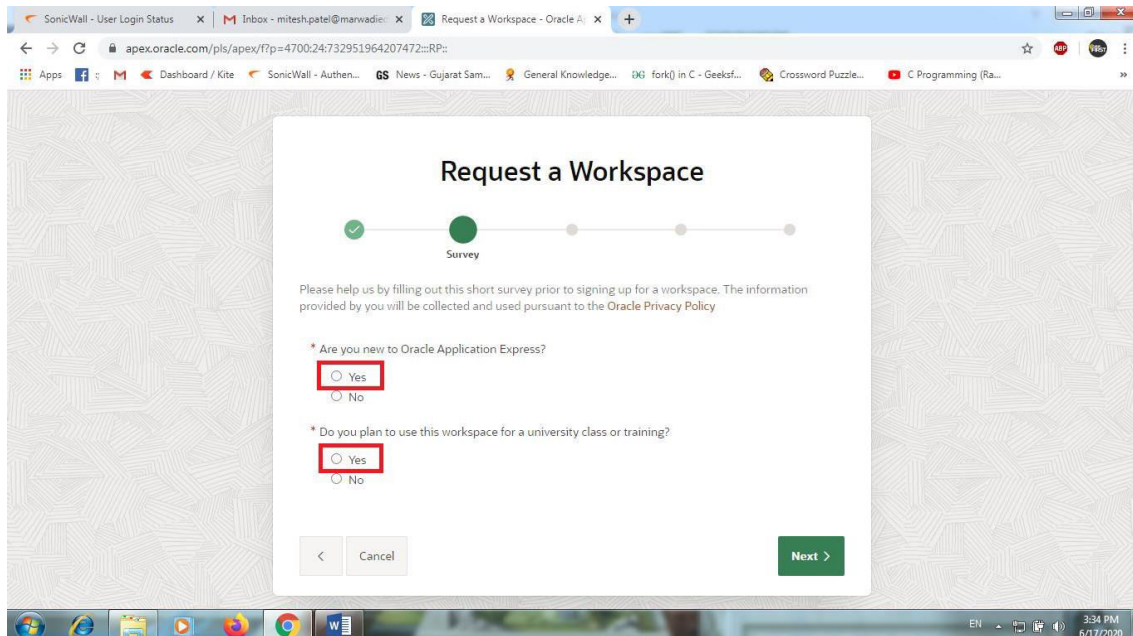
Last Name: Your last name (ex. Patel)

Email: Use your institute email address only.

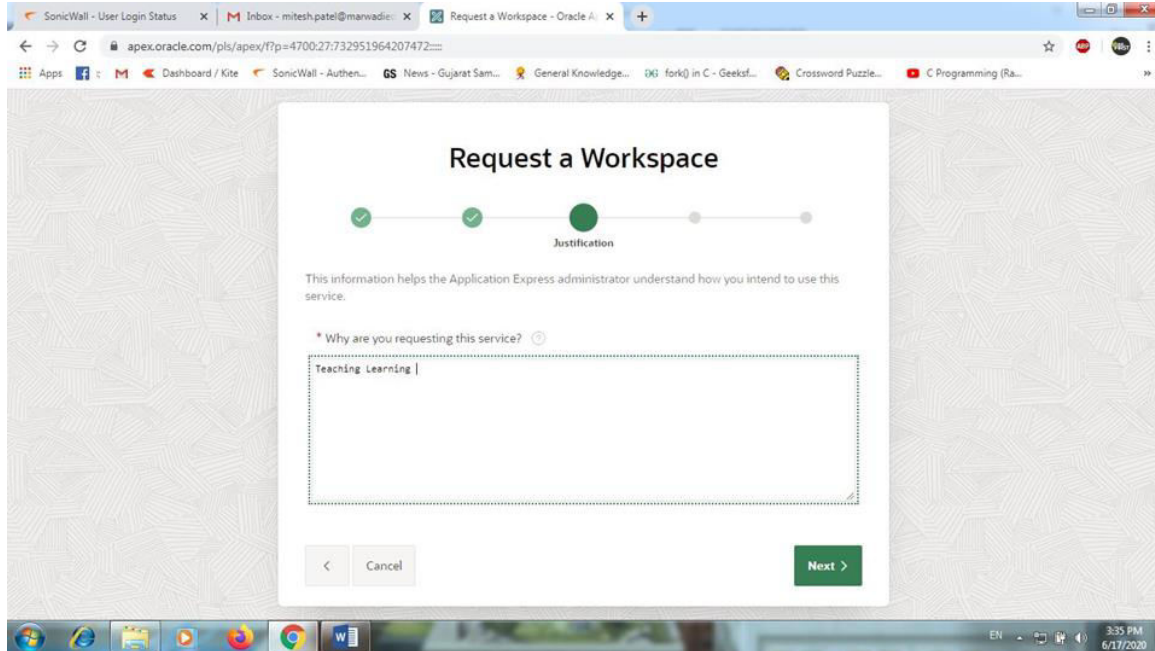
Workspace: name_surname And click on next.



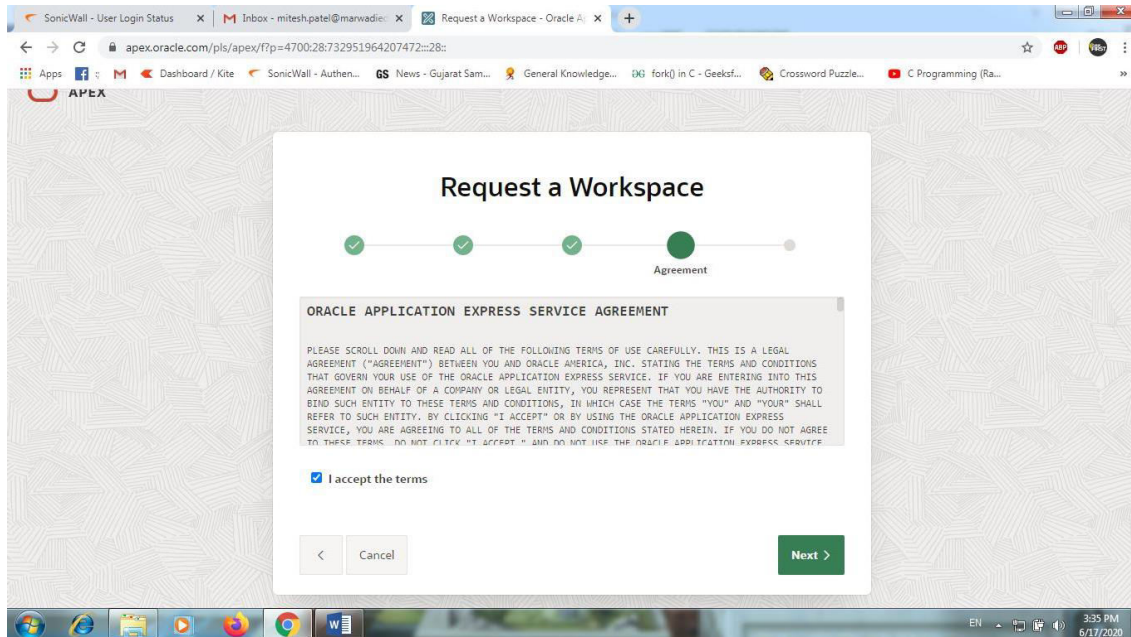
Step 4: Fill survey detail same as below and click on next.



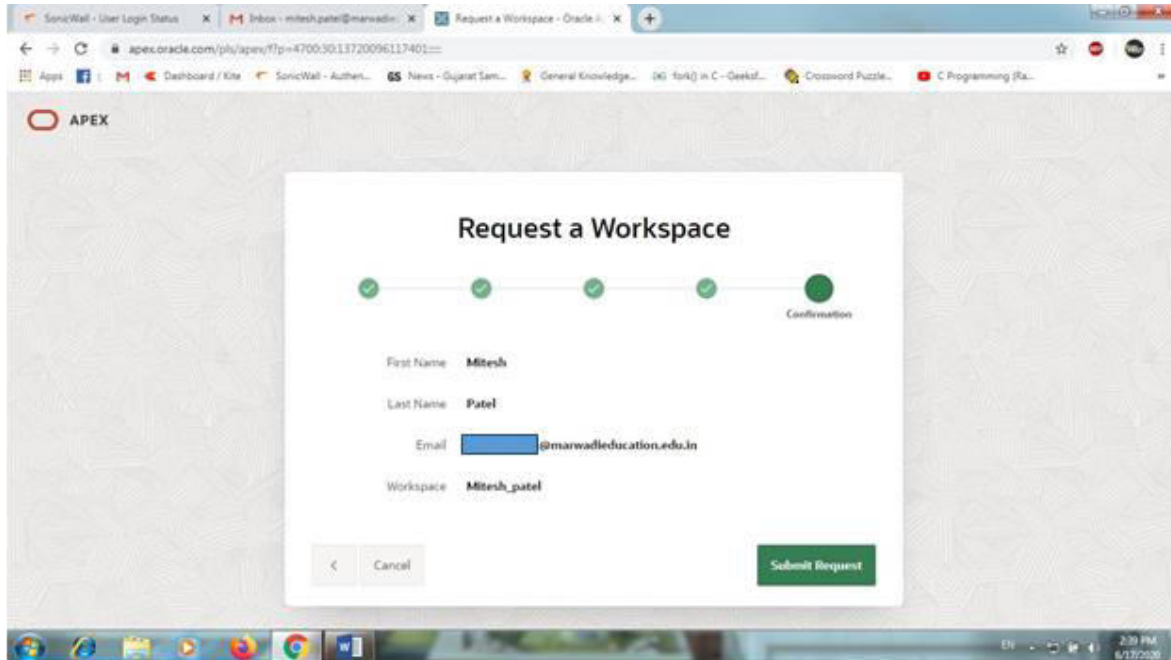
Step 5: Write appropriate text in text area and Click on next,



Step 6: Click on checkbox to agree terms and conditions and Click on next.

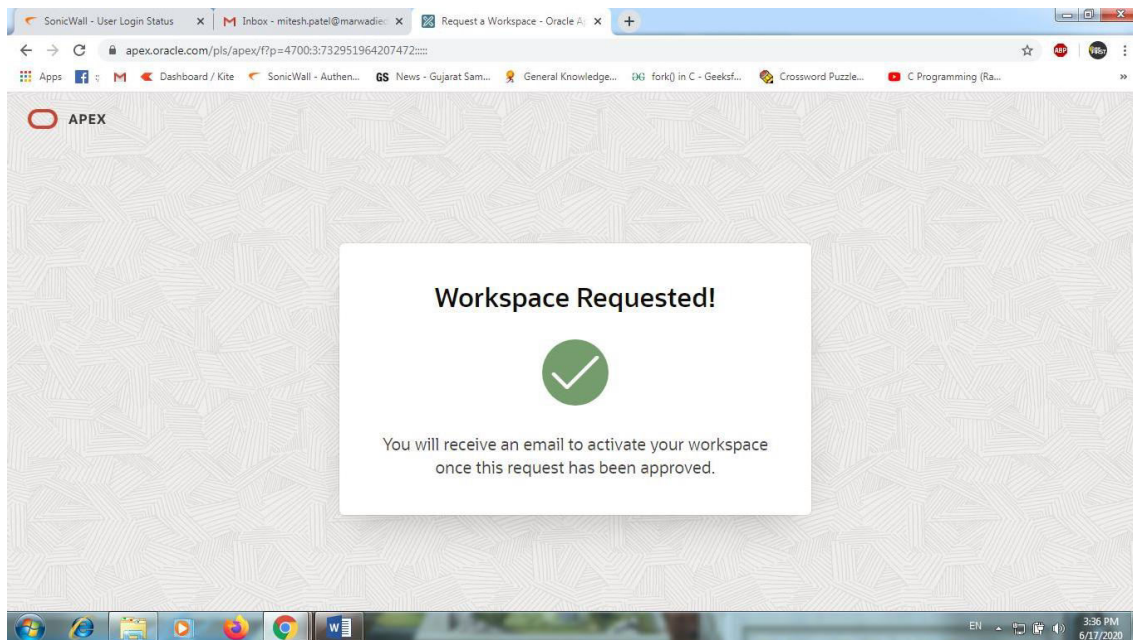


Step 7: Click on submit request button and Click on next



The screenshot shows a web browser window with the URL `apex.oracle.com/pls/apex/f?p=4700:30:13720096117401::`. The page displays the 'Request a Workspace' form. At the top, there is a progress bar with five steps, the last of which is 'Confirmation'. The form fields are: First Name (Mitesh), Last Name (Patel), Email (a redacted email address ending in @marwadieducation.edu.in), and Workspace (Mitesh_patel). There are 'Cancel' and 'Submit Request' buttons at the bottom.

Step 8: After that you will receive an email on your institute email id.



Step 9: Click on create workspace.

Hello mitesh patel,

Your workspace request has been approved!

Workspace:

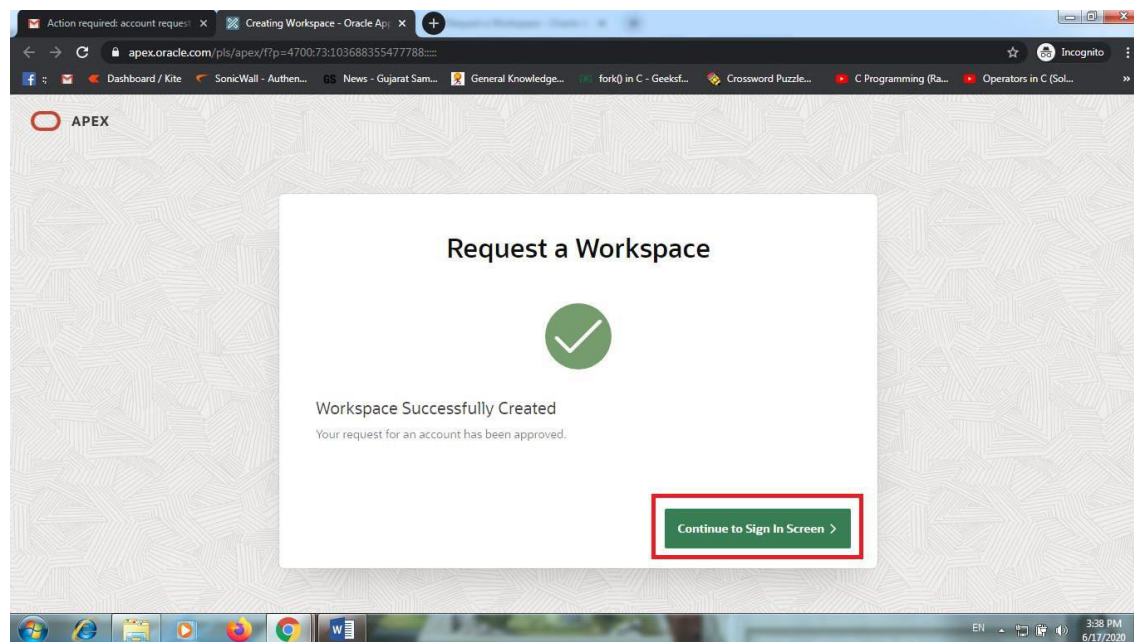
Username:

Environment:

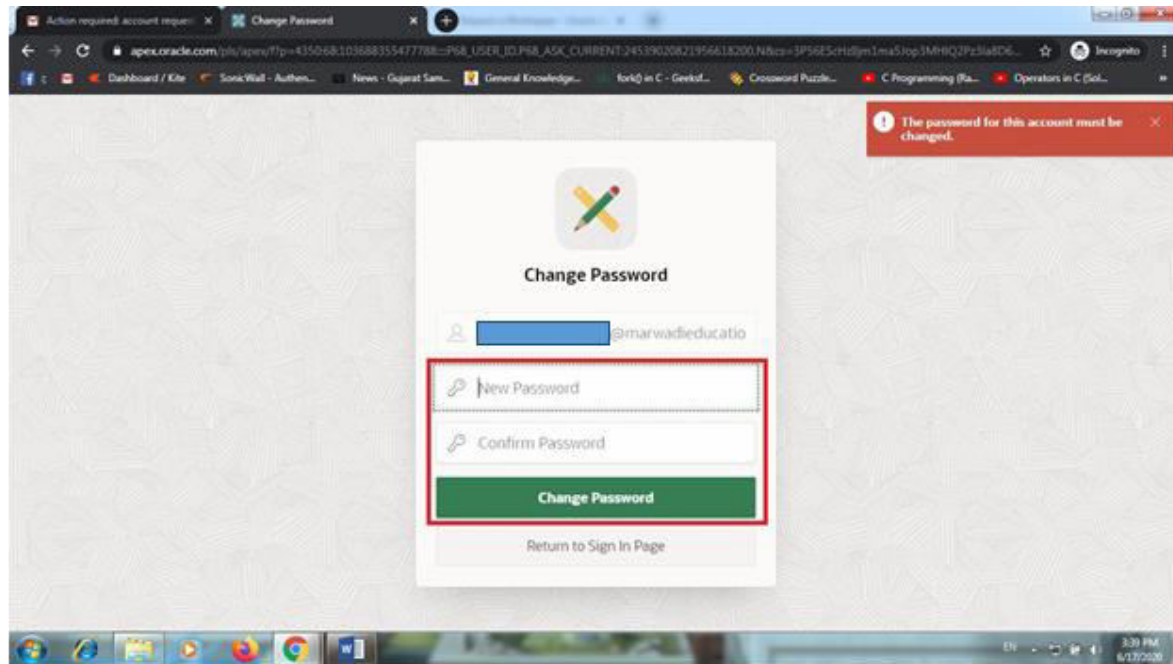
Click the button below to complete the approval process and set your password.

Create Workspace

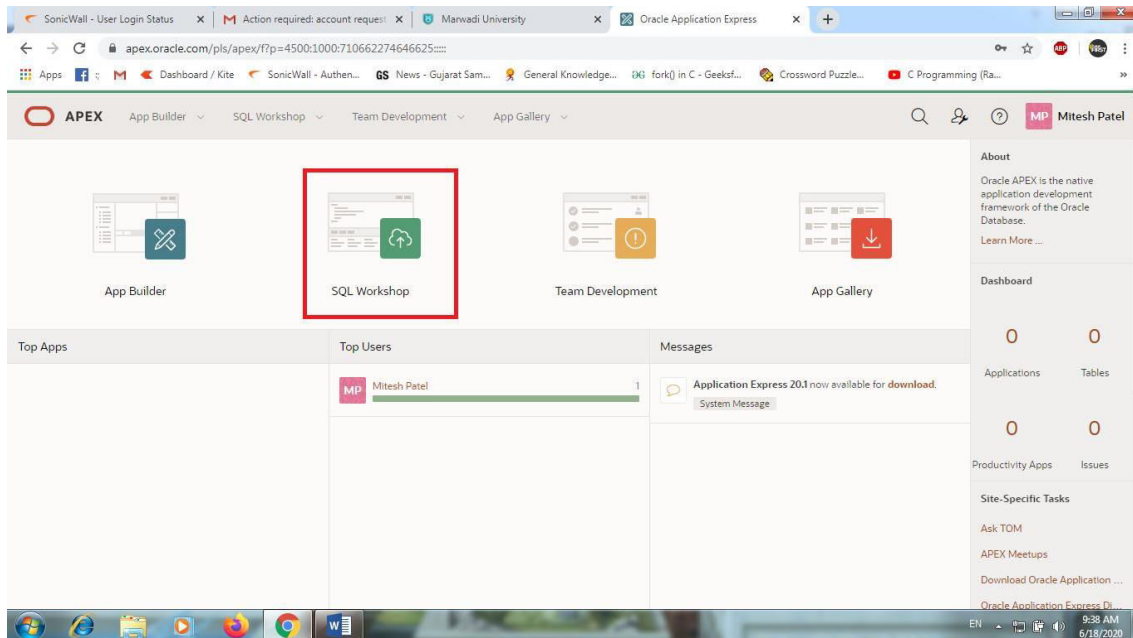
Step 10: Click on Continue to sign in screen.



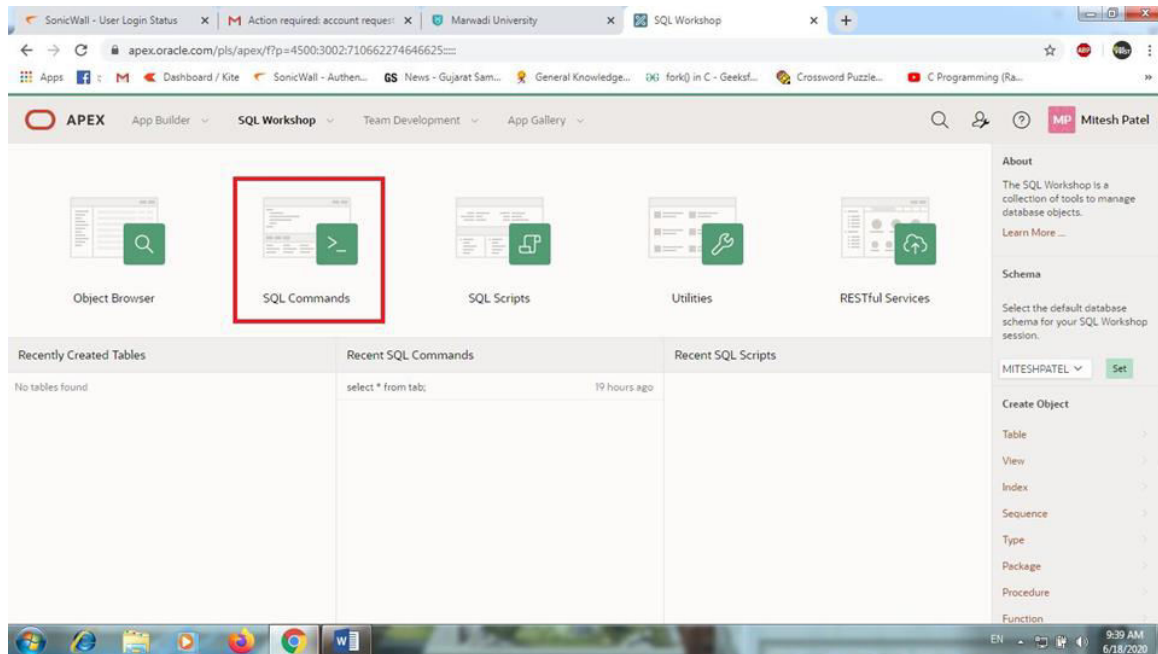
Step 11: Set your new password and confirm password and click on change password.



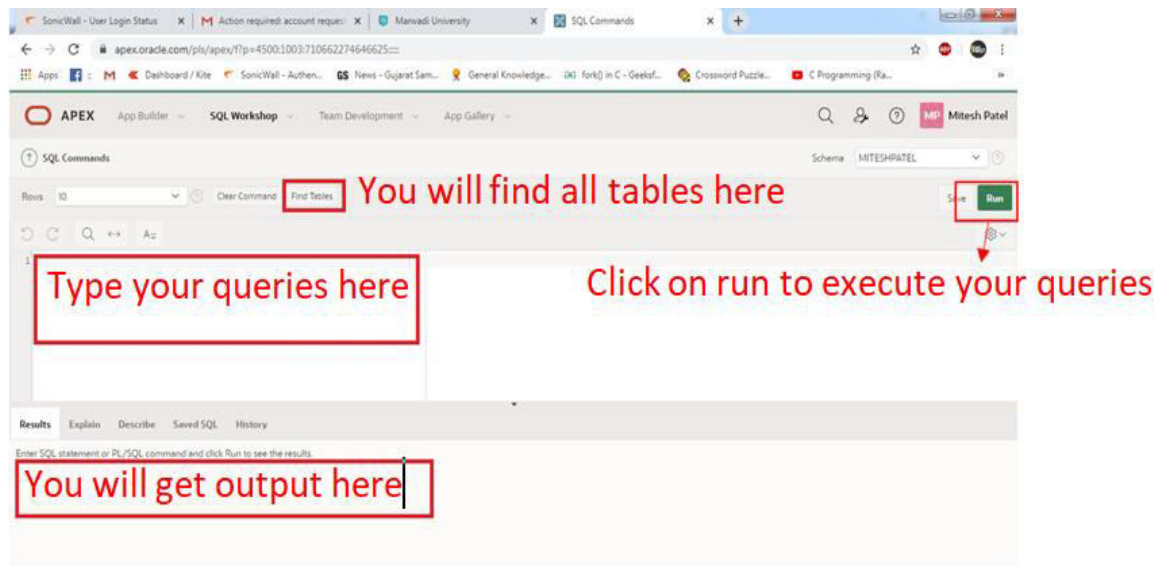
Step 12: Click on SQL workshop.



Step 13: Click on SQL Commands.



Step 14: Now you can perform your queries.



Practical 2

Aim: DDL Commands and Table Creation.

Create a table ACCOUNT

Column name	Data Type	Size
acc_no	varchar2	5
Name	varchar2	30
City	varchar2	20
Balance	Number	10,2
loan_taken	varchar2	5

Insert the following records.

acc_no	Name	City	Balance	loan_taken
A001	Patel Jigar	Mehsana	50000	YES
A002	Patel Ramesh	Mehsana	50000	YES
A003	Dave Hardik	Ahmedabad	75000	NO
A004	Soni Hetal	Ahmedabad	100000	NO
A005	Sony Atul	Vadodara	100000	YES

Code:

```
create table account(
  acc_no varchar2(5),
  name varchar2(30),
  city varchar2(20),
  balance number(10,2),
  loan_taken varchar(5)
);
insert into account values(
  'A001','Patel Jigar','Mehsana',50000,'Yes',
);
insert into account values(
  'A002','Patel Ramesh','Mehsana',50000,'Yes',
);
```

```
insert into account values(
    'A003','Dave Hardik','Ahmedabad',75000,'No',
);
insert into account values(
    'A004','Soni Hetal','Ahmedabad',100000,'Yes',
);
insert into account values(
    'A005','Soni Atul','Vadodara',100000,'Yes',
);
```

select * from account;

Output:

ACC_NO	NAME	CITY	BALANCE	LOAN_TAKEN
A002	Patel Ramesh	Mehsana	50000	Yes
A003	Dave hardik	Ahmedabad	75000	Yes
A005	Soni Atul	Vadodara	1000000	Yes
A001	Patel Hiren	Mehsana	50000	Yes
A004	Soni Hetal	Ahmedabad	1000000	Yes

5 rows returned in 0.01 seconds [Download](#)

Create a Table LOAN

Column Name	Data Type	Size
loan_no	varchar2	5
acc_no	varchar2	5
loan_amt	number	10,2
interest_rate	number	5,2
loan_date	date	
remaining_loan	number	10,2

Insert the following Records.

Loan_no	Acc_no	Loan_amt	Interest_rate	Loan_date	Remaining_loan
L001	A001	100000	7	1-jan-04	75000
L002	A002	300000	9	18-may-04	150000
L003	A005	500000	11	15-june-04	300000

Code:

```
create table Loan(  
  
    loan_no varchar2(5),  
  
    acc_no varchar2(5),  
  
    loan_amt number(10,2),  
  
    interest_rate Number(5,2),  
  
    loan_date date,  
  
    remaining_loan number(10,2)  
  
);  
  
insert into Loan values(  
  
    'L001','A001',100000,7,'01-01-2004',75000  
  
);  
  
insert into Loan values(  
  
    'L002','A002',300000,9,'05-18-2004',150000  
  
);  
  
select * from Loan
```

Output:

Results Explain Describe Saved SQL History					
LOAN_NO	ACC_NO	LOAN_AMT	INTEREST_RATE	LOAN_DATE	REMAINING_LOAN
L001	A001	100000	7	01/01/2004	75000
L002	A002	300000	9	05/18/2004	150000

2 rows returned in 0.01 seconds [Download](#)

Create a table INSTALLMENT

Column Name	Data Type	Size
loan_no	varchar2	5
inst_no	varchar2	5
inst_Date	Date	
Amount	Number	10,2

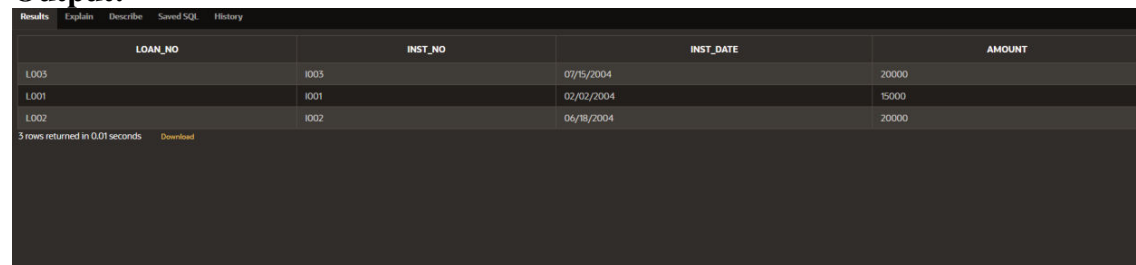
Insert following Records

Loan_no	Inst_no	Date	Amount
L001	I001	2-Feb-04	15000
L002	I002	18-June-04	20000
L003	I003	15-July-04	20000

Code:

```
create table installment(
  loan_no varchar2(5),
  inst_no varchar2(5),
  inst_date Date,
  Amount Number(10,2)
);
insert into installment values(
  'L001','I001','02-02-2004',15000
);
insert into installment values(
  'L002','I002','06-18-2004',20000
);
insert into installment values(
  'L003','I003','07-15-2004',20000
);
select * from installment
```

Output:



LOAN_NO	INST_NO	INST_DATE	AMOUNT
L003	I003	07/15/2004	20000
L001	I001	02/02/2004	15000
L002	I002	06/18/2004	20000

3 rows returned in 0.01 seconds

Create a Table TRANSACTION

Column Name	Data Type	Size
acc_no	Varchar2	5
tr_Date	Date	
Amt	Number	10,2
type_of_tr	Char	1
mode_of_pay	Varchar2	10

Insert a Following Records

Acc_no	Date	Amt	Type_of_tr	Mode_of_pay
A001	3-may-04	10000	D	Cash
A002	5-july-04	5000	W	Cheque
A003	12-Aug-04	25000	D	Cheque
A004	15-may-04	30000	D	Cheque
A005	22-oct-04	15000	W	Cash

Code:

```
create table Transaction(
  acc_no varchar2(5),
  tr_date date,
  Amt number(10,2),
  type_of_tr char(1),
  mode_of_pay Varchar2(10)
);
insert into Transaction values(
  'A001','05-03-2004',10000,'D','Cash'
);
insert into Transaction values(
  'A002','07-05-2004',5000,'W','Cheque'
);
insert into Transaction values(
  'A003','08-12-2004',25000,'D','Cheque'
);
insert into Transaction values(
  'A004','05-15-2004',30000,'D','Cheque'
);
insert into Transaction values(
  'A005','10-22-2004',15000,'W','Cash'
);
select * from Transaction
```

Output:

ACC_NO	TR_DATE	AMT	TYPE_OF_TR	MODE_OF_PAY
A002	07/05/2004	5000	W	Cheque
A004	05/15/2004	30000	D	Cheque
A001	10/22/2004	15000	W	Cash
A001	05/03/2004	10000	D	Cash
A003	08/12/2004	25000	D	Cheque

5 rows returned in 0.01 seconds [Download](#)

List of queries

1. Display all rows and all columns of table Transaction.

Code:

```
select * from transaction
```

Output:

ACC_NO	TR_DATE	AMT	TYPE_OF_TR	MODE_OF_PAY
A002	07/05/2004	5000	W	Cheque
A004	05/15/2004	30000	D	Cheque
A001	10/22/2004	15000	W	Cash
A001	05/03/2004	10000	D	Cash
A003	08/12/2004	25000	D	Cheque

5 rows returned in 0.01 seconds [Download](#)

2. Display all rows and selected columns of table Installment.

Code:

```
select loan_no,inst_no from installment;
```

Output:

LOAN_NO	INST_NO
L003	I003
L001	I001
L002	I002

3 rows returned in 0.00 seconds [Download](#)

3. Display selected rows and selected columns of table Account.

Code:

```
select Acc_no,name from Account where Acc_no='A003';
```

Output:

Results

Explain

Describe

Saved SQL

History

ACC_NO	NAME
A003	Dave hardik

1 rows returned in 0.02 seconds

Download

4. Display selected rows and all columns of table loan.

Code:

```
select * from loan where loan_no='L002';
```

Output:

ResultsExplainDescribeSaved SQLHistory

LOAN_NO	ACC_NO	LOAN_AMT	INTEREST_RATE	LOAN_DATE	REMAINING_LOAN
L002	A002	300000	9	05/18/2004	150000

1 rows returned in 0.01 secondsDownload

5. Show the structure of the table loan, account and transaction.

Code:

```
desc loan;  
desc Account;  
desc Transaction;
```

Output:



Results	Explain	Describe	Saved SQL	History					
Object Type		TABLE ?	Object		LOAN ?				
Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
LOAN	LOAN_NO	VARCHAR2	5	-	-	-	✓	-	-
	ACC_NO	VARCHAR2	5	-	-	-	✓	-	-
	LOAN_AMT	NUMBER	-	10	2	-	✓	-	-
	INTEREST_RATE	NUMBER	-	5	2	-	✓	-	-
	LOAN_DATE	DATE	7	-	-	-	✓	-	-
	REMAINING_LOAN	NUMBER	-	10	2	-	✓	-	-

Results

Explain

Describe

Saved SQL

History

Object Type

TABLE ?

Object

ACCOUNT ?

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
ACCOUNT	ACC_NO	VARCHAR2	5	-	-	-	✓	-	-
	NAME	VARCHAR2	30	-	-	-	✓	-	-
	CITY	VARCHAR2	20	-	-	-	✓	-	-
	BALANCE	NUMBER	-	10	2	-	✓	-	-
	LOAN_TAKEN	VARCHAR2	5	-	-	-	✓	-	-

Results

Explain

Describe

Saved SQL

History

Object Type

TABLE ?

Object

TRANSACTION ?

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
TRANSACTION	ACC_NO	VARCHAR2	5	-	-	-	✓	-	-
	TR_DATE	DATE	7	-	-	-	✓	-	-
	AMT	NUMBER	-	10	2	-	✓	-	-
	TYPE_OF_TR	CHAR	1	-	-	-	✓	-	-
	MODE_OF_PAY	VARCHAR2	10	-	-	-	✓	-	-

Practical 3

Aim: DML Commands and Queries

Table: **ACCOUNT**.

Insert the following records if you have not inserted in PRACTIAL - 1

Acc_no	Name	City	Balance	Loan_taken
A001	Patel Jigar	Mehsana	50000	YES
A002	Patel Ramesh	Mehsana	50000	Yes
A003	Dave Hardik	Ahmedabad	75000	NO
A004	Soni Hetal	Ahmedabad	100000	NO
A005	Soni Atul	Vadodara	100000	YES

Code:

```
create table account(
    acc_no varchar2(5),
    name varchar2(30),
    city varchar2(20),
    balance number(10,2),
    loan_taken varchar(5)
);
insert into account values(
    'A001','Patel Jigar','Mehsana',50000,'Yes',
);
insert into account values(
    'A002','Patel Ramesh','Mehsana',50000,'Yes',
);
insert into account values(
    'A003','Dave Hardik','Ahmedabad',75000,'No',
);
insert into account values(
    'A004','Soni Hetal','Ahmedabad',100000,'Yes',
);
```



```
insert into account values(
    'A005','Soni Atul','Vadodara',100000,'Yes',
);
select * from account;
```

Output:

Results	Explain	Describe	Saved SQL	History
ACC_NO	NAME	CITY	BALANCE	LOAN_TAKEN
A002	Patel Ramesh	Mehsana	50000	Yes
A003	Dave hardik	Ahmedabad	75000	Yes
A005	Sony Atul	Vadodara	1000000	Yes
A001	Patel Hiren	Mehsana	50000	Yes
A004	Soni Hetala	Ahmedabad	1000000	Yes

5 rows returned in 0.00 seconds [Download](#)

1. Change the name 'patel jigar' to 'patel hiren'.

Code:

```
update account set name='Patel Jigar' where name='Patel Hiren';
select * from account;
```

Output:

Results	Explain	Describe	Saved SQL	History
ACC_NO	NAME	CITY	BALANCE	LOAN_TAKEN
A002	Patel Ramesh	Mehsana	50000	Yes
A003	Dave hardik	Ahmedabad	75000	Yes
A005	Sony Atul	Vadodara	1000000	Yes
A001	Patel Jigar	Mehsana	50000	Yes
A004	Soni Hetala	Ahmedabad	1000000	Yes

5 rows returned in 0.01 seconds [Download](#)

2. Change the name and city where account number is A005. (new name = 'kothari nehal' and new city = 'patan').

Code:

```
update account set name='kothari nehal',city='patan' where acc_no='A005';
```

```
select * from account;
```

Output:

Results	Explain	Describe	Saved SQL	History
ACC_NO	NAME	CITY	BALANCE	LOAN_TAKEN
A002	Patel Ramesh	Mehsana	50000	Yes
A003	Dave hardik	Ahmedabad	75000	Yes
A005	kothari nehal	patan	1000000	Yes
A001	Patel Jigar	Mehsana	50000	Yes
A004	Soni Hetala	Ahmedabad	1000000	Yes

5 rows returned in 0.00 seconds [Download](#)

3. Display only those records where loan taken status is 'YES'.

Code:

```
select * from account where loan_taken='Yes';
```

Output:

Results	Explain	Describe	Saved SQL	History
ACC_NO	NAME	CITY	BALANCE	LOAN_TAKEN
A002	Patel Ramesh	Mehsana	50000	Yes
A003	Dave hardik	Ahmedabad	75000	Yes
A005	kothari nehal	patan	1000000	Yes
A001	Patel Jigar	Mehsana	50000	Yes
A004	Soni Hetala	Ahmedabad	1000000	Yes

5 rows returned in 0.01 seconds [Download](#)

4. Add the new column (address varchar2 (20)) into table ACCOUNT.

Code:

```
alter table account add(address Varchar2(20));
```

```
desc account;
```

Output:

Results

Explain

Describe

Saved SQL

History

Object Type

TABLE ?

Object

ACCOUNT ?

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
ACCOUNT	ACC_NO	VARCHAR2	5	-	-	-	✓	-	-
	NAME	VARCHAR2	30	-	-	-	✓	-	-
	CITY	VARCHAR2	20	-	-	-	✓	-	-
	BALANCE	NUMBER	-	10	2	-	✓	-	-
	LOAN_TAKEN	VARCHAR2	5	-	-	-	✓	-	-
	ADDRESS	VARCHAR2	20	-	-	-	✓	-	-

5. Create another table ACCOUNT_TEMP (acc_no, name, balance) from table ACCOUNT.

Code:

```
create table acc_temp(acc_no,name,balance) as select acc_no,name,balance from account;
desc acc_temp;
```

Output:

Results

Explain

Describe

Saved SQL

History

Object Type

TABLE ?

Object

ACC_TEMP ?

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
ACC_TEMP	ACC_NO	VARCHAR2	5	-	-	-	✓	-	-
	NAME	VARCHAR2	30	-	-	-	✓	-	-
	BALANCE	NUMBER	-	10	2	-	✓	-	-

6. Rename the table ACCOUNT to ACCOUNT_MASTER.

Code:

```
rename account to acc_master;
desc acc_master;
```

Output:

Results

Explain

Describe

Saved SQL

History

Object Type

TABLE

Object

ACC_MASTER

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
ACC_MASTER	ACC_NO	VARCHAR2	5	-	-	-	✓	-	-
	NAME	VARCHAR2	30	-	-	-	✓	-	-
	CITY	VARCHAR2	20	-	-	-	✓	-	-
	BALANCE	NUMBER	-	10	2	-	✓	-	-
	LOAN_TAKEN	VARCHAR2	5	-	-	-	✓	-	-
	ADDRESS	VARCHAR2	20	-	-	-	✓	-	-

7. Update the column balance for all the account holders. (Multiply the balance by 2 for each account holders)

Code:

```
update acc_master set balance=balance*2;
```

```
select * from acc_master;
```

Output:

Results

Explain

Describe

Saved SQL

History

ACC_NO	NAME	CITY	BALANCE	LOAN_TAKEN	ADDRESS
A002	Patel Ramesh	Mehsana	100000	Yes	-
A003	Dave hardik	Ahmedabad	150000	Yes	-
A005	kothari nehal	patan	2000000	Yes	-
A001	Patel Jigar	Mehsana	100000	Yes	-
A004	Soni Hetala	Ahmedabad	2000000	Yes	-

5 rows returned in 0.01 seconds

Download

8. Describe the structure of table ACCOUNT.

Code:

```
desc acc_master;
```

Output:

Results

Explain

Describe

Saved SQL

History

Object Type

TABLE

Object

ACC_MASTER

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
ACC_MASTER	ACC_NO	VARCHAR2	5	-	-	-	✓✓	-	-
	NAME	VARCHAR2	30	-	-	-	✓✓	-	-
	CITY	VARCHAR2	20	-	-	-	✓✓	-	-
	BALANCE	NUMBER	-	10	2	-	✓✓	-	-
	LOAN_TAKEN	VARCHAR2	5	-	-	-	✓✓	-	-
	ADDRESS	VARCHAR2	20	-	-	-	✓✓	-	-

9. Delete the records whose account no is A004.

Code:

```
delete from acc_master where acc_no='A004';
```

```
select * from acc_master;
```

Output:

Results

Explain

Describe

Saved SQL

History

ACC_NO	NAME	CITY	BALANCE	LOAN_TAKEN	ADDRESS
A002	Patel Ramesh	Mehsana	100000	Yes	-
A003	Dave hardik	Ahmedabad	150000	Yes	-
A005	kothari nehal	patan	2000000	Yes	-
A001	Patel Jigar	Mehsana	100000	Yes	-

4 rows returned in 0.00 seconds

Download

Table: **LOAN**.

Insert the following Records if you have not inserted in PRACTICAL-1

Loan_n o	Acc_ no	Loan_am t	Interest_ra te	Loan_date	Remaining_loa n
L001	A001	100000	7	1-jan-04	75000
L002	A002	300000	9	18-may-04	150000
L003	A005	500000	11	15-june-04	300000

Code:

```
create table Loan(
    loan_no varchar2(5),
    acc_no varchar2(5),
    loan_amt number(10,2),
    interest_rate Number(5,2),
    loan_date date,
    remaining_loan number(10,2)
);
insert into Loan values(
    'L001','A001',100000,7,'01-01-2004',75000
);
insert into Loan values(
    'L002','A002',300000,9,'05-18-2004',150000
);
insert into Loan values(
    'L003','A005',500000,11,'06-15-2004',300000
);
select * from Loan
```

Output:

Results

Explain

Describe

Saved SQL

History

LOAN_NO	ACC_NO	LOAN_AMT	INTEREST_RATE	LOAN_DATE	REMAINING_LOAN
L001	A001	100000	7	01/01/2004	75000
L003	A005	500000	11	06/15/2004	300000
L002	A002	300000	9	05/18/2004	150000

3 rows returned in 0.01 seconds

Download

1. For each loan holders Add 100000 Rs. Amount into the column loan_amt.

Code:

```
update loan set loan_amt=loan_amt+100000;
select * from loan;
```

Output:

Results	Explain	Describe	Saved SQL	History	
LOAN_NO	ACC_NO	LOAN_AMT	INTEREST_RATE	LOAN_DATE	REMAINING_LOAN
L001	A001	200000	7	01/01/2004	75000
L003	A005	600000	11	06/15/2004	300000
L002	A002	400000	9	05/18/2004	150000
3 rows returned in 0.00 seconds		Download			

2. for each loan holders Increase the interest rate 2%.

Code:

update loan set interest_rate=interest_rate+2;

select * from loan;

Output:

Results	Explain	Describe	Saved SQL	History	
LOAN_NO	ACC_NO	LOAN_AMT	INTEREST_RATE	LOAN_DATE	REMAINING_LOAN
L001	A001	200000	9	01/01/2004	75000
L003	A005	600000	13	06/15/2004	300000
L002	A002	400000	11	05/18/2004	150000
3 rows returned in 0.00 seconds		Download			

3. Create another table LOAN_TEMP (loan_no, Acc_no, loan_amt, loan_date) from The table LOAN.

Code:

create table loan_temp(loan_no,acc_no,loan_amt,loan_date) as select
loan_no,acc_no,loan_amt,loan_date from loan;

Output:

Results	Explain	Describe	Saved SQL	History					
Object Type TABLE ? Object LOAN ?									
Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
LOAN	LOAN_NO	VARCHAR2	5	-	-	-	✓	-	-
	ACC_NO	VARCHAR2	5	-	-	-	✓	-	-
	LOAN_AMT	NUMBER	-	10	2	-	✓	-	-
	INTEREST_RATE	NUMBER	-	5	2	-	✓	-	-
	LOAN_DATE	DATE	7	-	-	-	✓	-	-
	REMAINING_LOAN	NUMBER	-	10	2	-	✓	-	-

4. Display only those records where loan holder taken a loan in month of January.

Code:

```
select * from loan where loan_date='01-01-2004';
```

Output:

Results

Explain

Describe

Saved SQL

History

LOAN_NO	ACC_NO	LOAN_AMT	INTEREST_RATE	LOAN_DATE	REMAINING_LOAN
L001	A001	200000	9	01/01/2004	75000

1 rows returned in 0.01 seconds

Download

5. Modify the structure of table LOAN by adding one column credit_no varchar2 (4).

Code:

```
alter table loan add (credit_no Varchar2(4));
```

```
desc loan;
```

Output:

Results

Explain

Describe

Saved SQL

History

Object Type

TABLE ?

Object

LOAN ?

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
LOAN	LOAN_NO	VARCHAR2	5	-	-	-	✓	-	-
	ACC_NO	VARCHAR2	5	-	-	-	✓	-	-
	LOAN_AMT	NUMBER	-	10	2	-	✓	-	-
	INTEREST_RATE	NUMBER	-	5	2	-	✓	-	-
	LOAN_DATE	DATE	7	-	-	-	✓	-	-
	REMAINING_LOAN	NUMBER	-	10	2	-	✓	-	-
	CREDIT_NO	VARCHAR2	4	-	-	-	✓	-	-

6. Display the Loan amount*2 of table LOAN.

Code:

```
update loan set loan_amt=loan_amt*2;
select * from loan;
```

Output:

Results

Explain

Describe

Saved SQL

History

LOAN_NO	ACC_NO	LOAN_AMT	INTEREST_RATE	LOAN_DATE	REMAINING_LOAN	CREDIT_NO
L001	A001	400000	9	01/01/2004	75000	-
L003	A005	1200000	13	06/15/2004	300000	-
L002	A002	800000	11	05/18/2004	150000	-

3 rows returned in 0.01 seconds

Download

7. Display the records of table LOAN by date wise in ascending order.

Code:

```
select* fromloan order by loan_date;
```

Output:

Results

Explain

Describe

Saved SQL

History

LOAN_NO	ACC_NO	LOAN_AMT	INTEREST_RATE	LOAN_DATE	REMAINING_LOAN	CREDIT_NO
L001	A001	400000	9	01/01/2004	75000	-
L002	A002	800000	11	05/18/2004	150000	-
L003	A005	1200000	13	06/15/2004	300000	-

3 rows returned in 0.01 seconds

Download

8. Display the records of table LOAN by account number wise in descending Order.

Code:

```
select * FROM loan ORDER BY acc_no DESC;
```

Output:

Results

Explain

Describe

Saved SQL

History

LOAN_NO	ACC_NO	LOAN_AMT	INTEREST_RATE	LOAN_DATE	REMAINING_LOAN	CREDIT_NO
L003	A005	1200000	13	06/15/2004	300000	-
L002	A002	800000	11	05/18/2004	150000	-
L001	A001	400000	9	01/01/2004	75000	-

3 rows returned in 0.01 seconds

Download