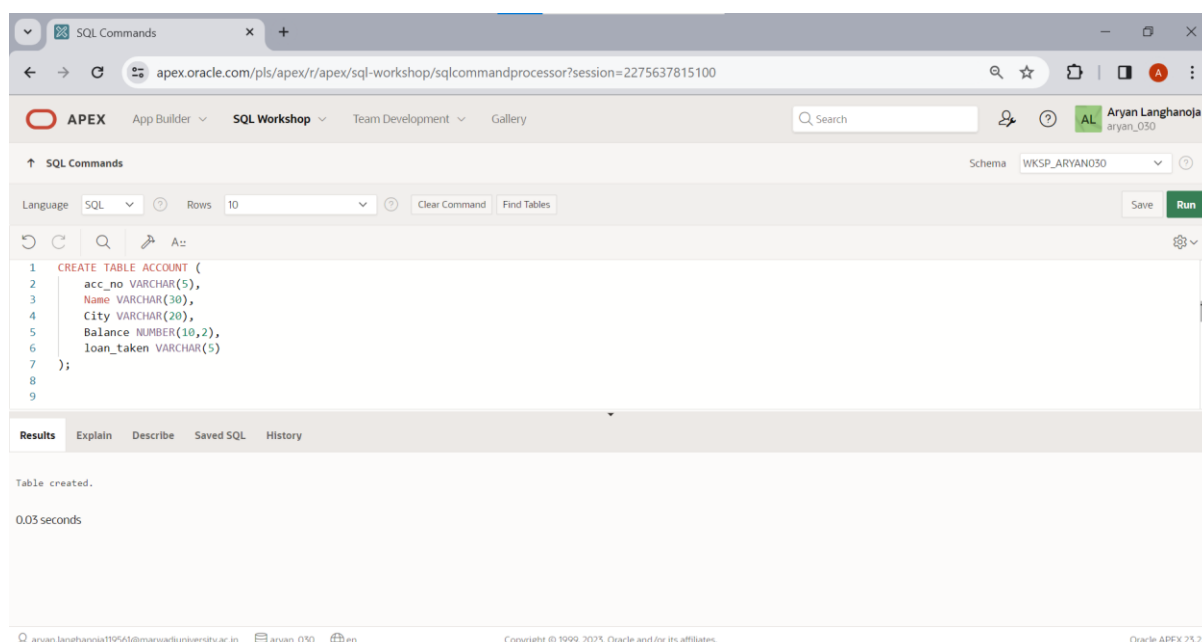


## Practical 2

### 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



The screenshot shows the Oracle APEX SQL Workshop interface. The SQL command entered is:

```

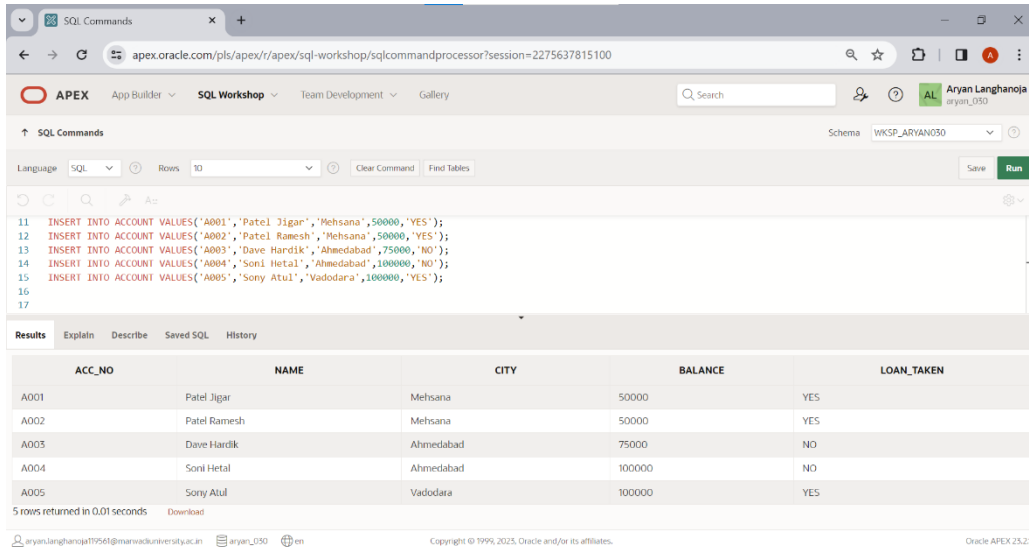
1 CREATE TABLE ACCOUNT (
2   acc_no VARCHAR(5),
3   Name VARCHAR(30),
4   City VARCHAR(20),
5   Balance NUMBER(10,2),
6   loan_taken VARCHAR(5)
7 );
8
9

```

The command was executed successfully, and the results pane shows "Table created." and "0.03 seconds".

#### 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



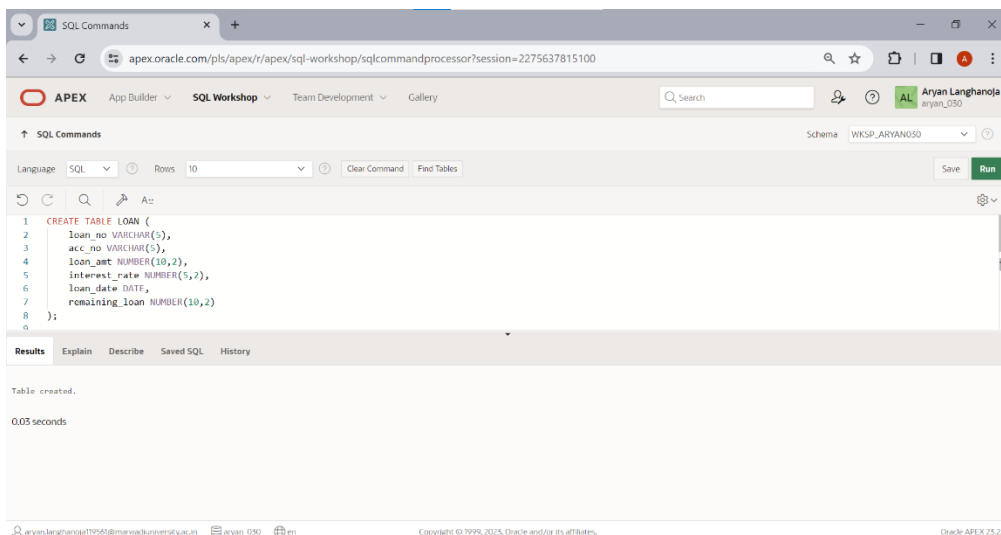
The screenshot shows the APEX SQL Workshop interface. The SQL Commands tab is active, displaying five INSERT statements for the ACCOUNT table. The Results tab shows the execution output as a table with 5 rows.

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

5 rows returned in 0.01 seconds

### 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



The screenshot shows the APEX SQL Workshop interface. The SQL Commands tab is active, displaying the CREATE TABLE LOAN command. The Results tab shows the execution output as a message indicating the table was created successfully.

```

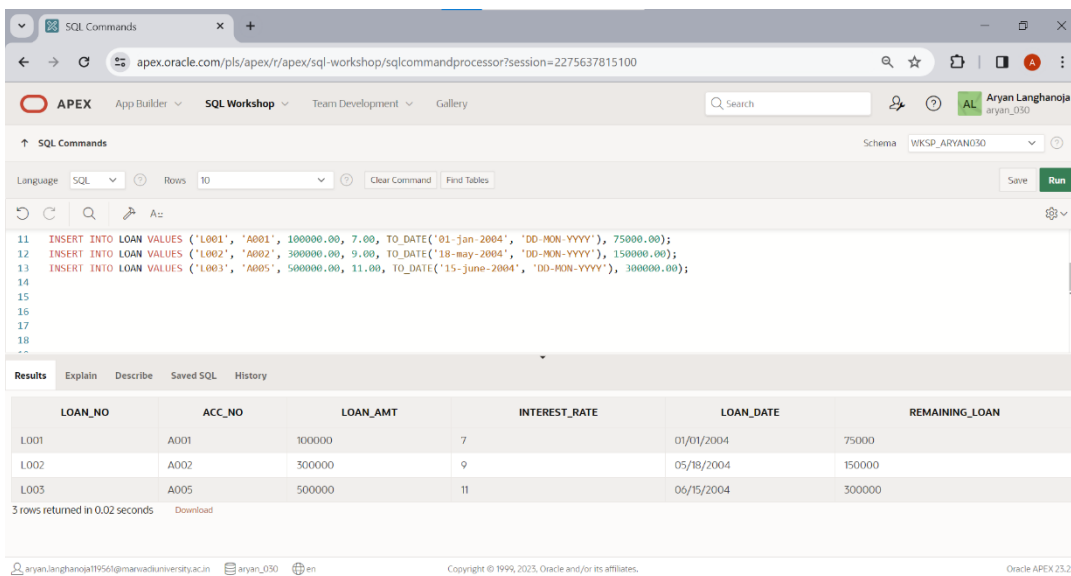
1 CREATE TABLE LOAN (
2   loan_no VARCHAR(5),
3   acc_no VARCHAR(5),
4   loan_amt NUMBER(10,2),
5   interest_rate NUMBER(5,2),
6   loan_date DATE,
7   remaining_loan NUMBER(10,2)
8 );

```

Table created.  
0.03 seconds

**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

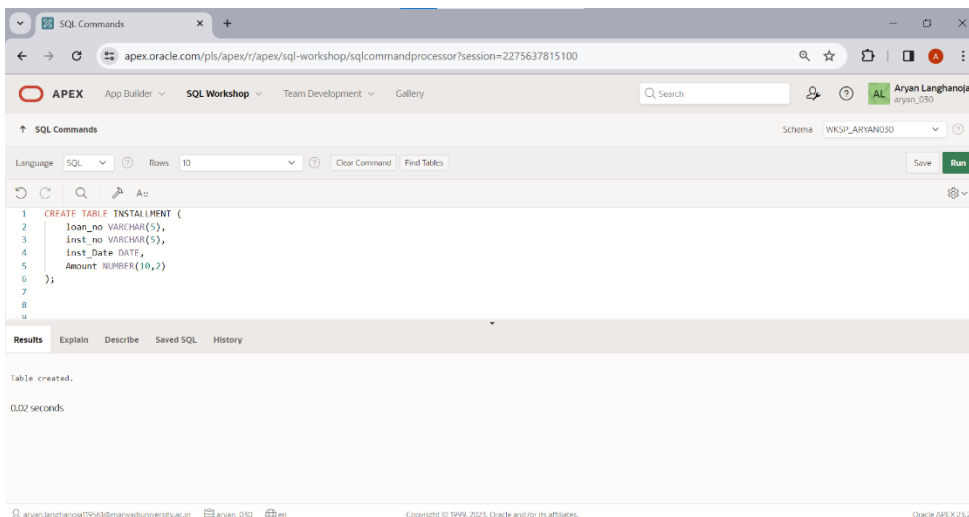


The screenshot shows the APEX SQL Workshop interface. The SQL Commands tab is active, displaying three INSERT statements. The Results tab shows the execution output: 3 rows returned in 0.02 seconds. The results are displayed in a table with columns: LOAN\_NO, ACC\_NO, LOAN\_AMT, INTEREST\_RATE, LOAN\_DATE, and REMAINING\_LOAN.

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
L003	A005	500000	11	06/15/2004	300000

**Create a table INSTALLMENT**

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



The screenshot shows the APEX SQL Workshop interface. The SQL Commands tab is active, displaying a CREATE TABLE statement. The Results tab shows the execution output: Table created. 0.02 seconds.

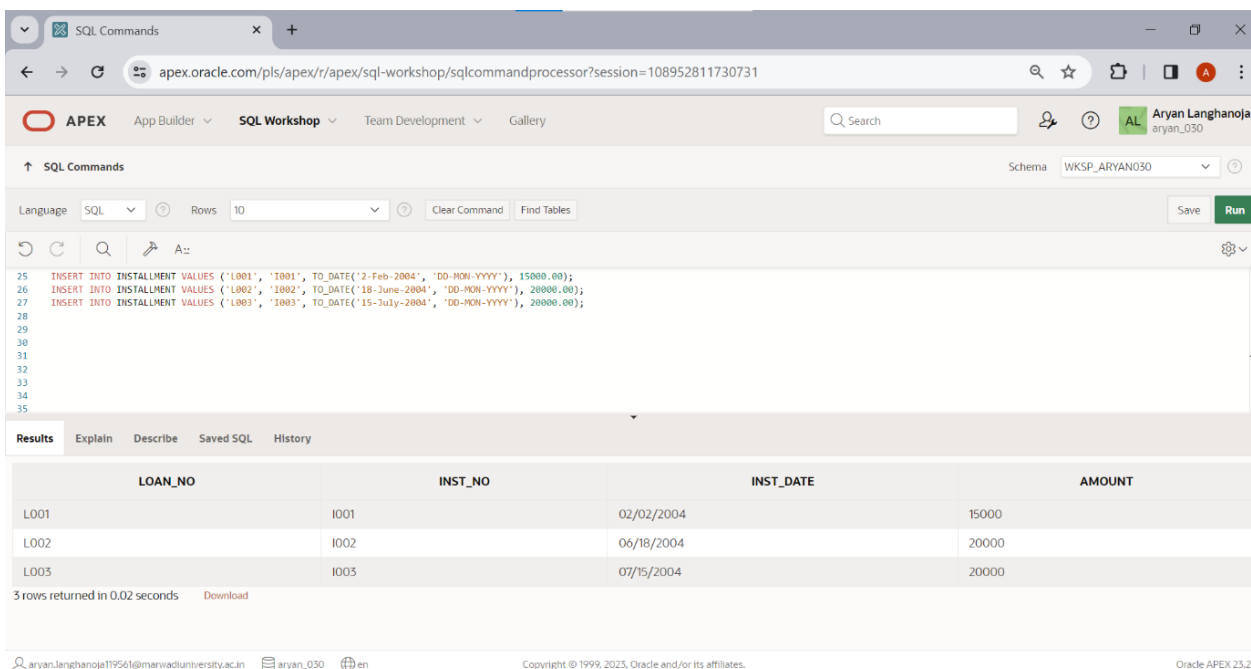
```

1 CREATE TABLE INSTALLMENT (
2   loan_no VARCHAR(5),
3   inst_no VARCHAR(5),
4   inst_Date DATE,
5   Amount NUMBER(10,2)
6 );
7
8
9

```

### 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



The screenshot shows the Oracle APEX SQL Workshop interface. The SQL Commands tab is active, displaying three INSERT statements for the INSTALLMENT table. The Results tab shows the execution output, which matches the data from the table above.

```

25 INSERT INTO INSTALLMENT VALUES ('L001', 'I001', TO_DATE('2-Feb-2004', 'DD-MON-YYYY'), 15000.00);
26 INSERT INTO INSTALLMENT VALUES ('L002', 'I002', TO_DATE('18-June-2004', 'DD-MON-YYYY'), 20000.00);
27 INSERT INTO INSTALLMENT VALUES ('L003', 'I003', TO_DATE('15-July-2004', 'DD-MON-YYYY'), 20000.00);

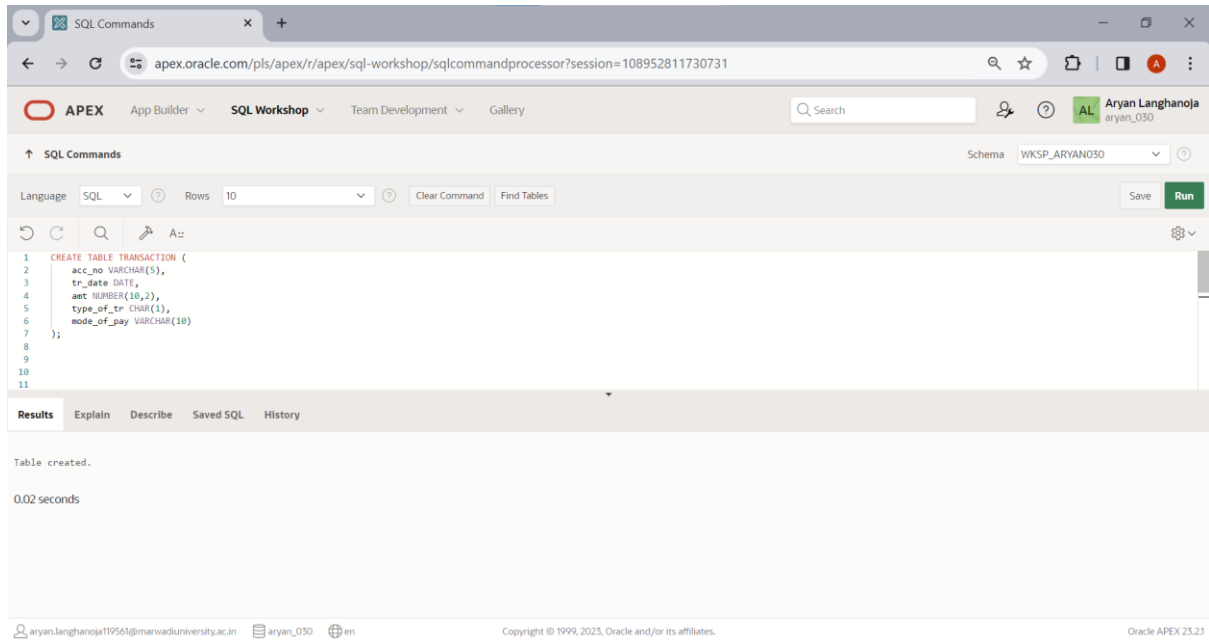
```

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

3 rows returned in 0.02 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



The screenshot shows the Oracle APEX SQL Workshop interface. The 'SQL Commands' tab is active, displaying a SQL script to create a table named TRANSACTION. The script is as follows:

```

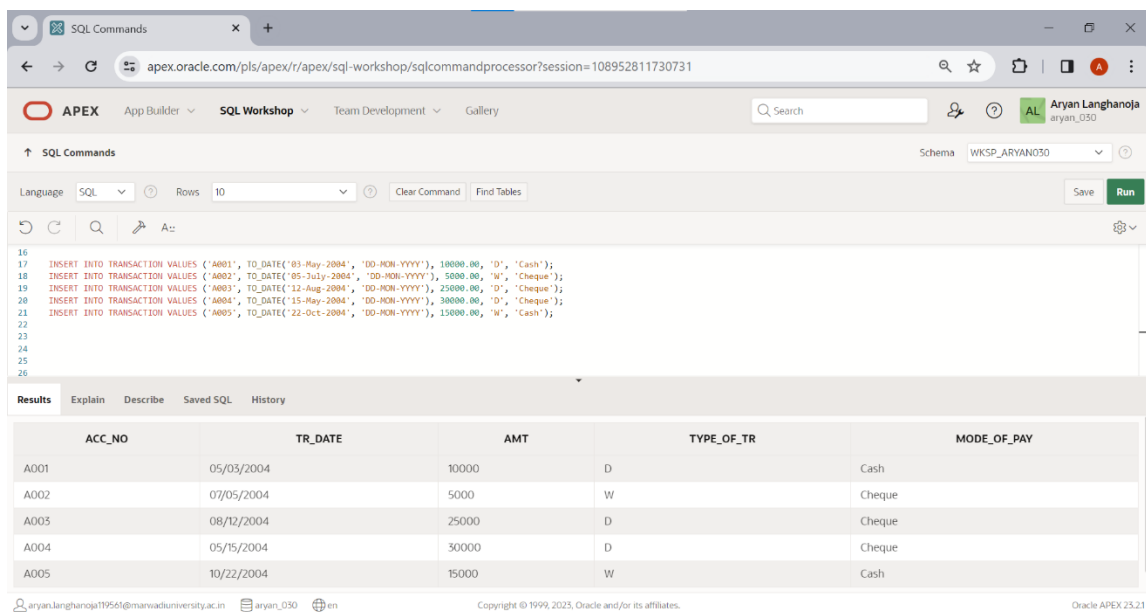
1 CREATE TABLE TRANSACTION (
2   acc_no VARCHAR(5),
3   tr_date DATE,
4   amt NUMBER(10,2),
5   type_of_tr CHAR(1),
6   mode_of_pay VARCHAR(10)
7 );
8
9
10
11

```

The 'Results' tab shows the message 'Table created.' and the execution time '0.02 seconds'.

### 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



The screenshot shows the Oracle APEX SQL Workshop interface. The 'SQL Commands' tab is active, displaying a SQL script to insert five records into the TRANSACTION table. The script is as follows:

```

16 INSERT INTO TRANSACTION VALUES ('A001', TO_DATE('03-May-2004', 'DD-MON-YYYY'), 10000.00, 'D', 'Cash');
17 INSERT INTO TRANSACTION VALUES ('A002', TO_DATE('05-July-2004', 'DD-MON-YYYY'), 5000.00, 'W', 'Cheque');
18 INSERT INTO TRANSACTION VALUES ('A003', TO_DATE('12-Aug-2004', 'DD-MON-YYYY'), 25000.00, 'D', 'Cheque');
19 INSERT INTO TRANSACTION VALUES ('A004', TO_DATE('15-May-2004', 'DD-MON-YYYY'), 30000.00, 'D', 'Cheque');
20 INSERT INTO TRANSACTION VALUES ('A005', TO_DATE('22-Oct-2004', 'DD-MON-YYYY'), 15000.00, 'W', 'Cash');
21
22
23
24
25
26

```

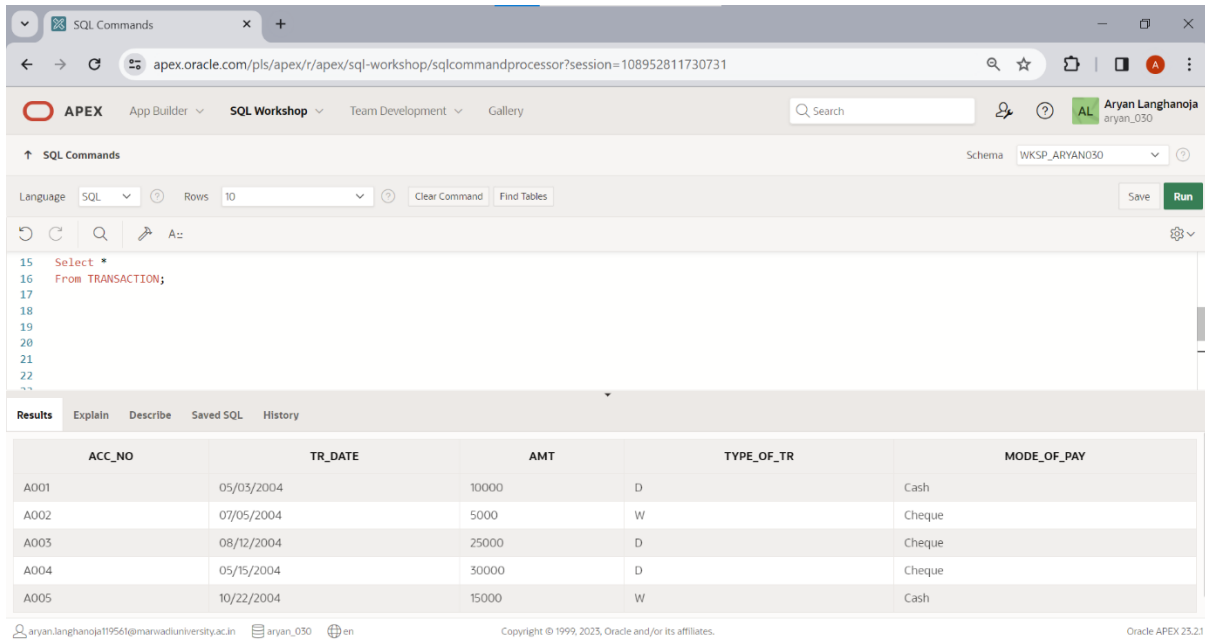
The 'Results' tab shows a table with the following data:

ACC_NO	TR_DATE	AMT	TYPE_OF_TR	MODE_OF_PAY
A001	05/03/2004	10000	D	Cash
A002	07/05/2004	5000	W	Cheque
A003	08/12/2004	25000	D	Cheque
A004	05/15/2004	30000	D	Cheque
A005	10/22/2004	15000	W	Cash

## Table-Account

### List of queries

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



The screenshot shows the Oracle APEX SQL Workshop interface. The SQL command entered is:

```

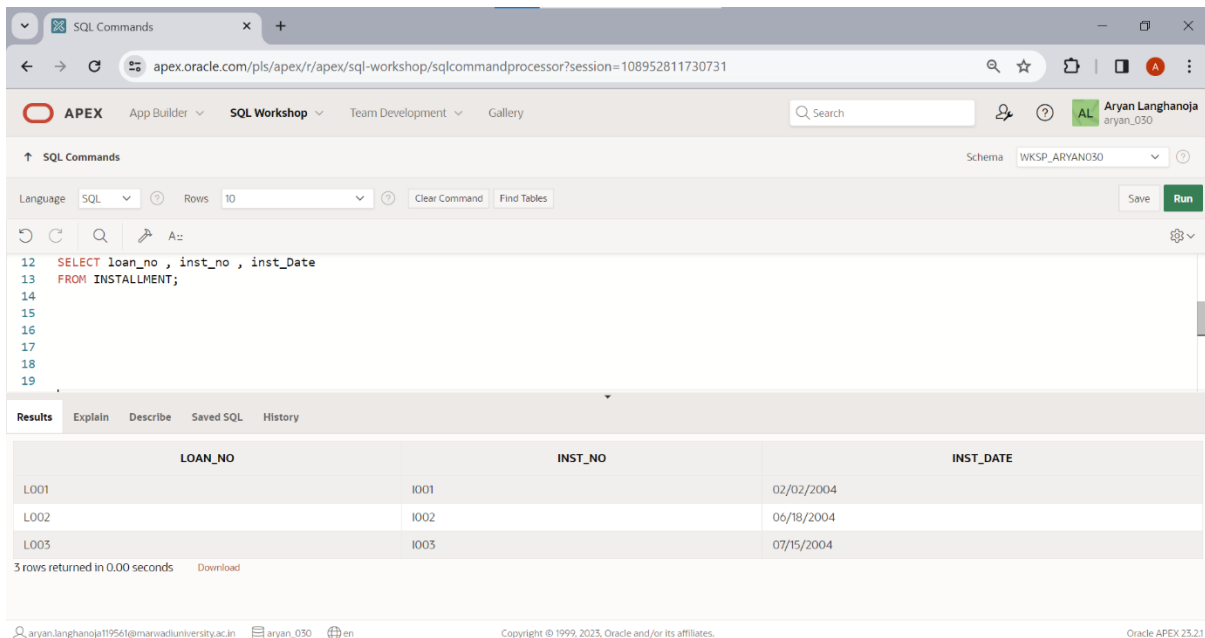
15 Select *
16 From TRANSACTION;
17
18
19
20
21
22

```

The results are displayed in a table with the following columns: ACC\_NO, TR\_DATE, AMT, TYPE\_OF\_TR, and MODE\_OF\_PAY. The data is as follows:

ACC_NO	TR_DATE	AMT	TYPE_OF_TR	MODE_OF_PAY
A001	05/03/2004	10000	D	Cash
A002	07/05/2004	5000	W	Cheque
A003	08/12/2004	25000	D	Cheque
A004	05/15/2004	30000	D	Cheque
A005	10/22/2004	15000	W	Cash

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



The screenshot shows the Oracle APEX SQL Workshop interface. The SQL command entered is:

```

12 SELECT loan_no , inst_no , inst_Date
13 FROM INSTALLMENT;
14
15
16
17
18
19

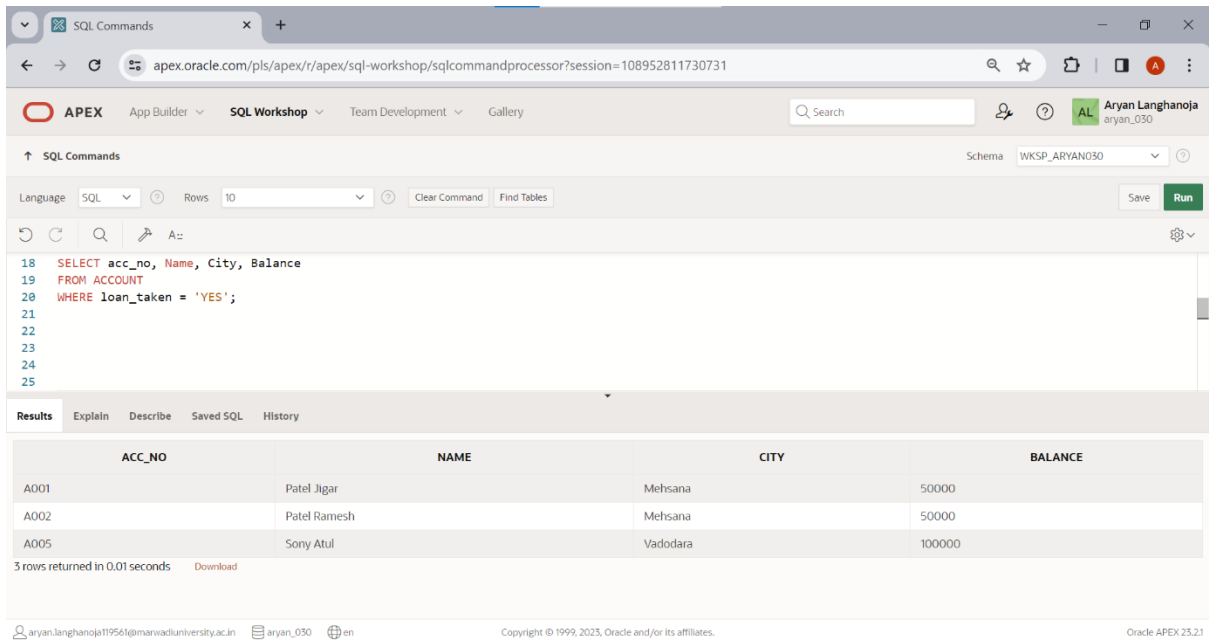
```

The results are displayed in a table with the following columns: LOAN\_NO, INST\_NO, and INST\_DATE. The data is as follows:

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

3 rows returned in 0.00 seconds

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



The screenshot shows the APEX SQL Workshop interface. The SQL command entered is:

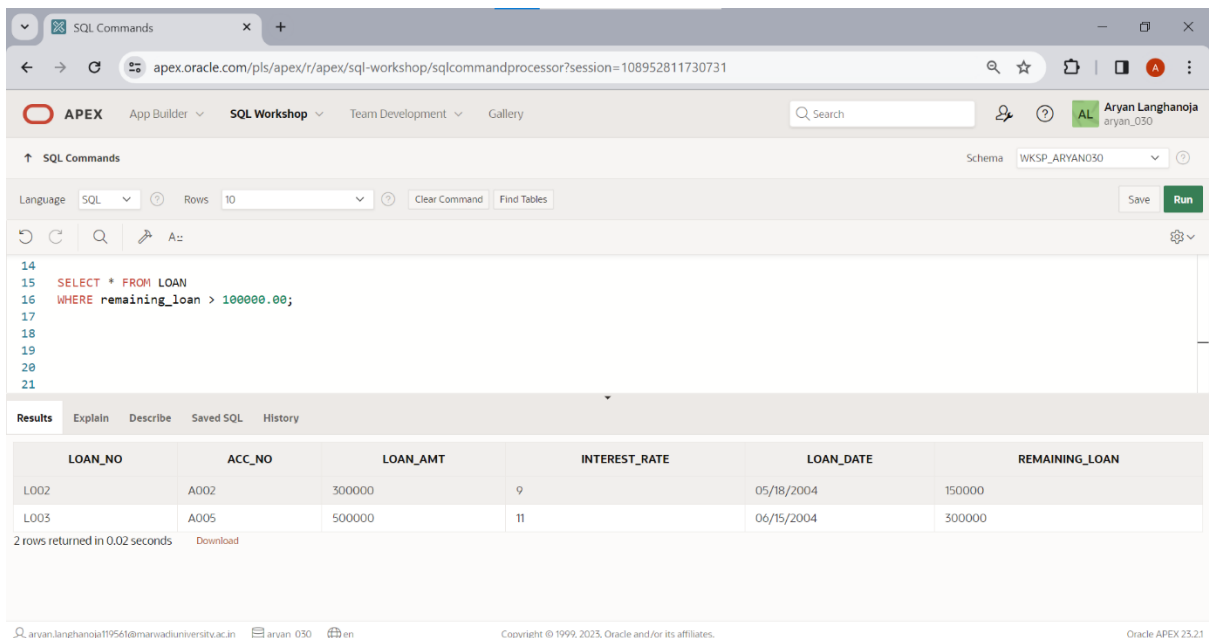
```
18 SELECT acc_no, Name, City, Balance
19 FROM ACCOUNT
20 WHERE loan_taken = 'YES';
21
22
23
24
25
```

The results are displayed in a table with the following data:

ACC_NO	NAME	CITY	BALANCE
A001	Patel Jigar	Mehsana	50000
A002	Patel Ramesh	Mehsana	50000
A005	Sony Atul	Vadodara	100000

3 rows returned in 0.01 seconds

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



The screenshot shows the APEX SQL Workshop interface. The SQL command entered is:

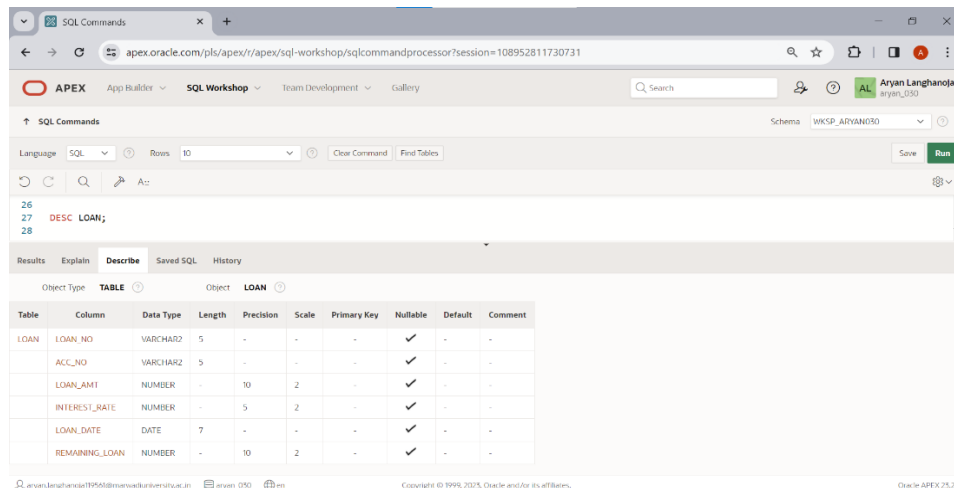
```
14 SELECT * FROM LOAN
15
16 WHERE remaining_loan > 100000.00;
17
18
19
20
21
```

The results are displayed in a table with the following data:

LOAN_NO	ACC_NO	LOAN_AMT	INTEREST_RATE	LOAN_DATE	REMAINING_LOAN
L002	A002	300000	9	05/18/2004	150000
L003	A005	500000	11	06/15/2004	300000

2 rows returned in 0.02 seconds

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



SQL Commands

apex.oracle.com/pls/apex/r/apex/sql-workshop/sqlcommandprocessor?session=108952811730731

APEX App Builder SQL Workshop Team Development Gallery

SQL Commands

Language SQL Rows 10 Clear Command Find Tables Save Run

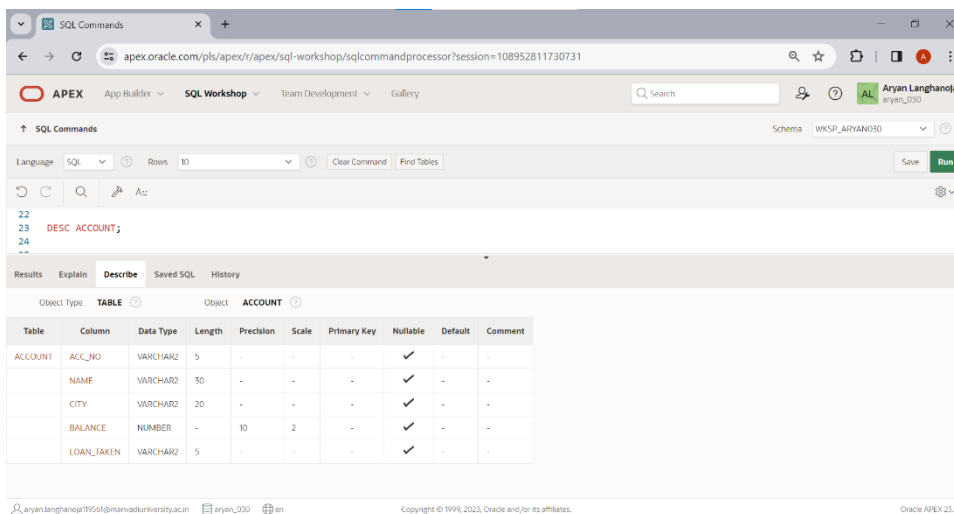
DESC LOAN;

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	-	✓	-	-

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SQL Commands

apex.oracle.com/pls/apex/r/apex/sql-workshop/sqlcommandprocessor?session=108952811730731

APEX App Builder SQL Workshop Team Development Gallery

SQL Commands

Language SQL Rows 10 Clear Command Find Tables Save Run

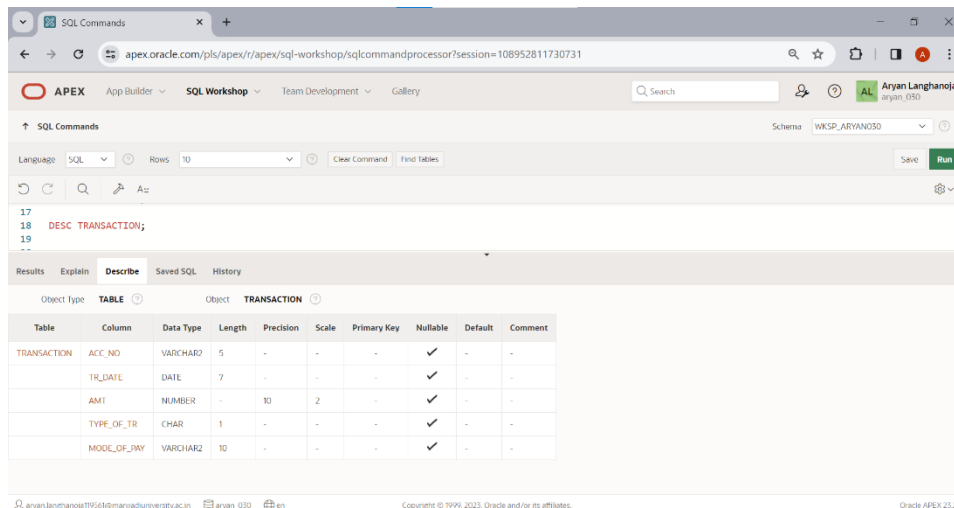
DESC ACCOUNT;

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	-	-	-	✓	-	-

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SQL Commands

apex.oracle.com/pls/apex/r/apex/sql-workshop/sqlcommandprocessor?session=108952811730731

APEX App Builder SQL Workshop Team Development Gallery

SQL Commands

Language SQL Rows 10 Clear Command Find Tables Save Run

DESC TRANSACTION;

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	-	-	-	✓	-	-

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