

Practical 3

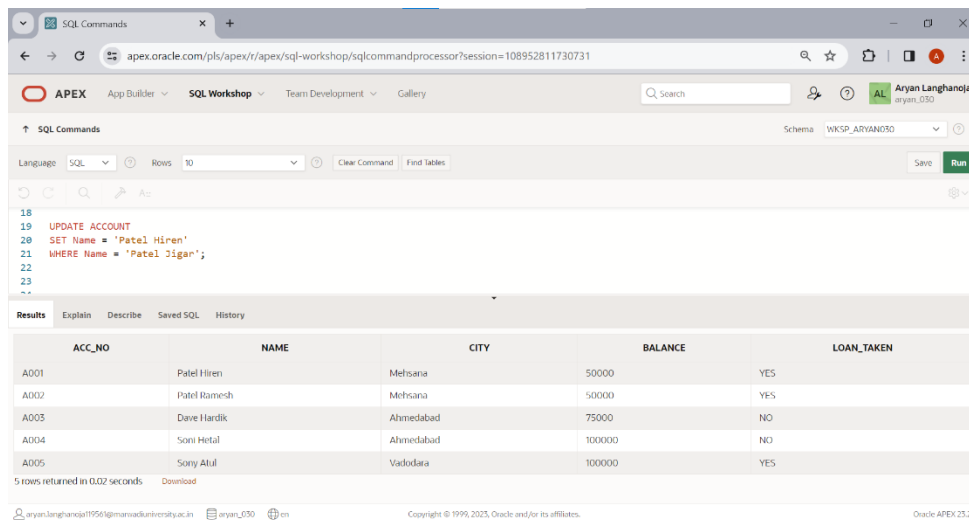
Aim: DML Commands and Queries

Table: **ACCOUNT**.

Insert the following records if you have not inserted in PRACTICAL - 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

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



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

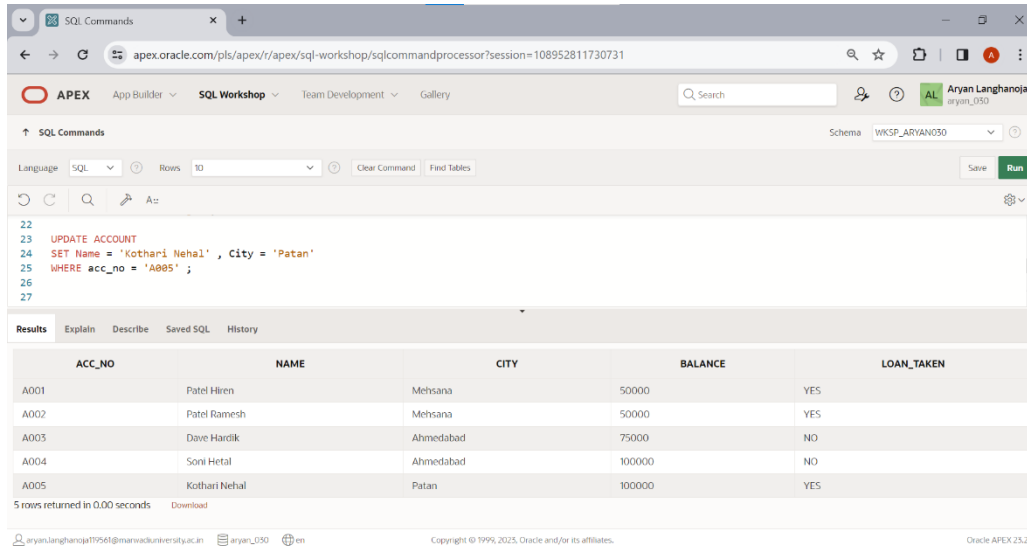
```
UPDATE ACCOUNT
SET Name = 'Patel Hiren'
WHERE Name = 'Patel Jigar';
```

The results table shows the following data:

ACC_NO	NAME	CITY	BALANCE	LOAN_TAKEN
A001	Patel Hiren	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

5 rows returned in 0.02 seconds

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



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

```

22
23 UPDATE ACCOUNT
24 SET Name = 'Kothari Nehal' , City = 'Patan'
25 WHERE acc_no = 'A005';
26
27

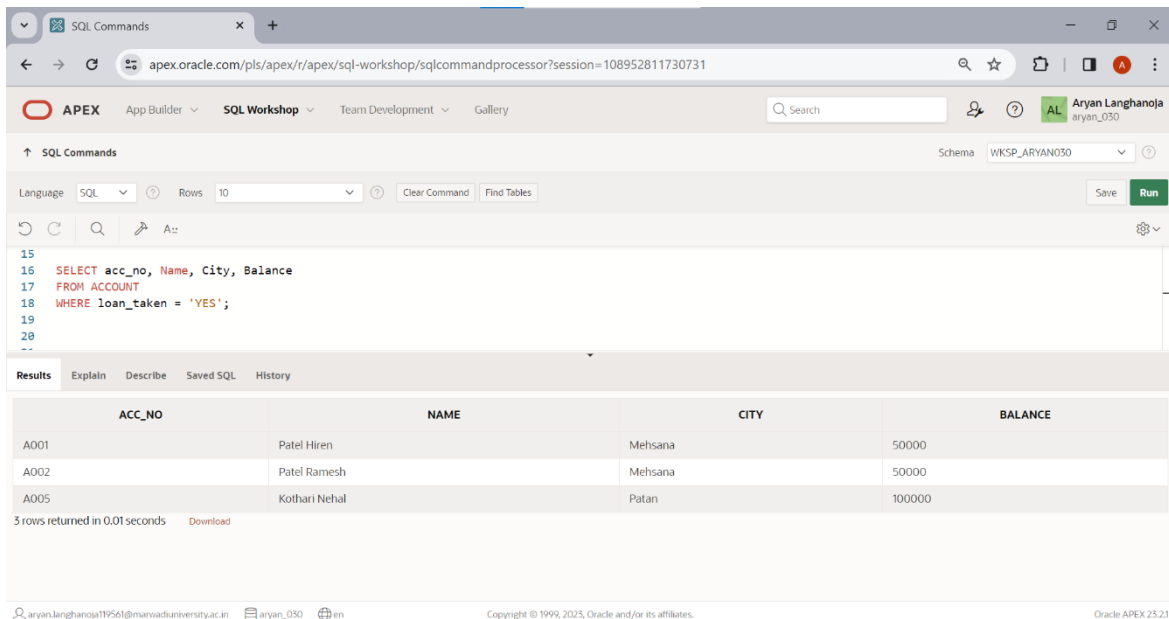
```

The results table shows the following data:

ACC_NO	NAME	CITY	BALANCE	LOAN_TAKEN
A001	Patel Hiren	Mehsana	50000	YES
A002	Patel Ramesh	Mehsana	50000	YES
A003	Dave Hardik	Ahmedabad	75000	NO
A004	Soni Hetal	Ahmedabad	100000	NO
A005	Kothari Nehal	Patan	100000	YES

5 rows returned in 0.00 seconds

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



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

```

15
16 SELECT acc_no, Name, City, Balance
17 FROM ACCOUNT
18 WHERE loan_taken = 'YES';
19
20

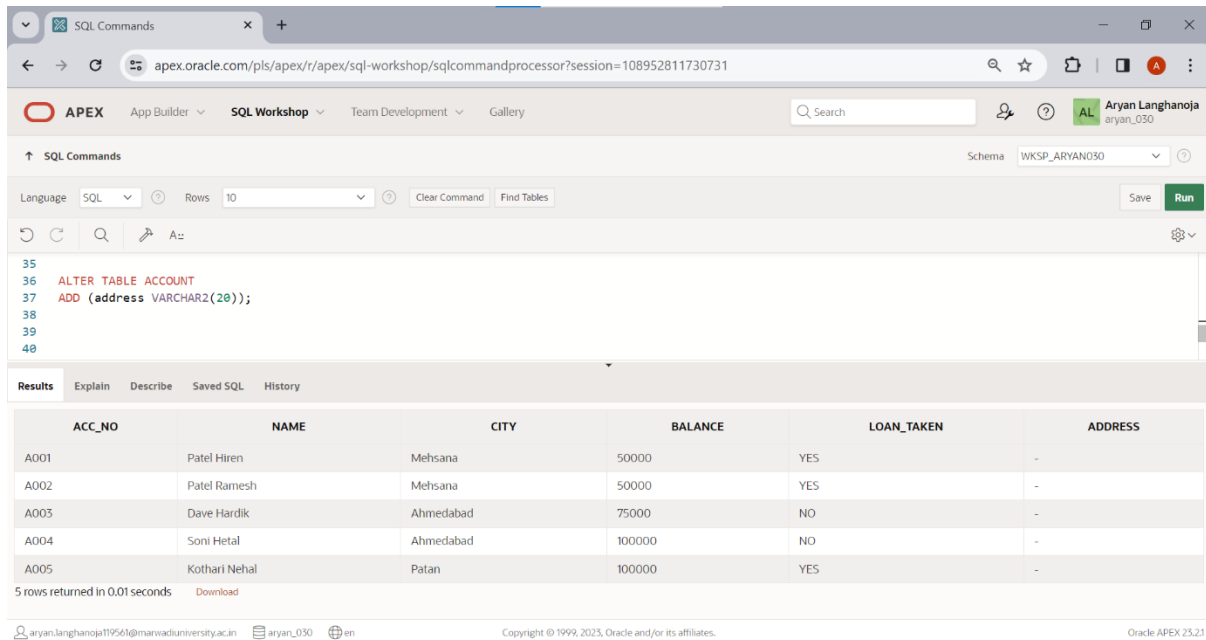
```

The results table shows the following data:

ACC_NO	NAME	CITY	BALANCE
A001	Patel Hiren	Mehsana	50000
A002	Patel Ramesh	Mehsana	50000
A005	Kothari Nehal	Patan	100000

3 rows returned in 0.01 seconds

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



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

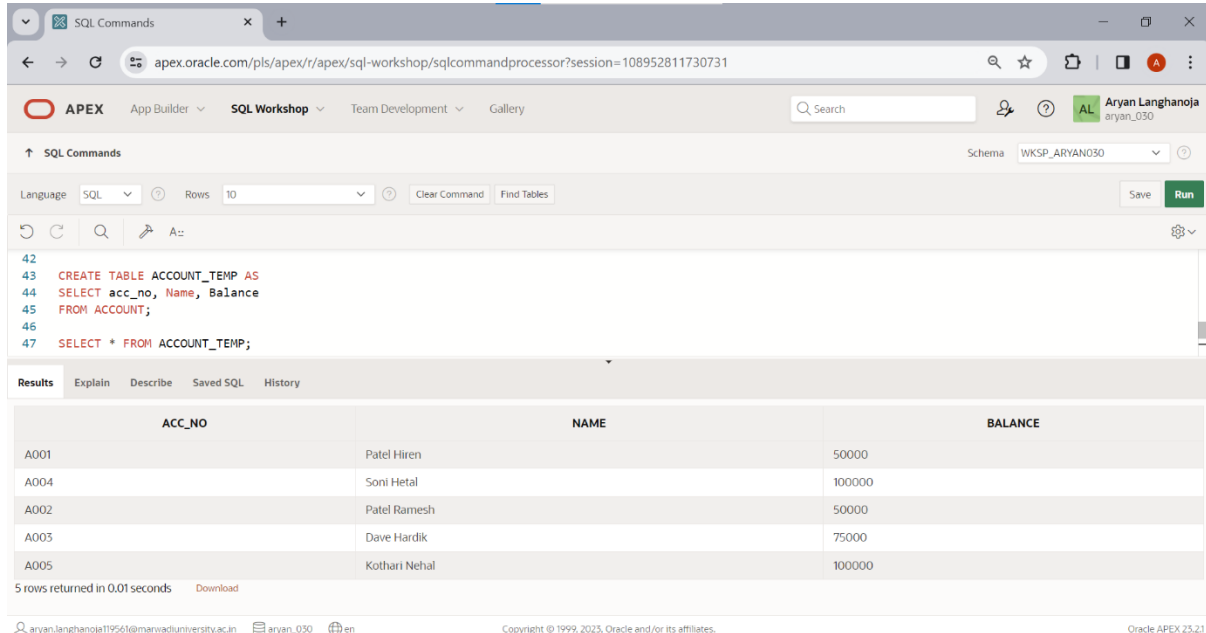
```
35
36 ALTER TABLE ACCOUNT
37 ADD (address VARCHAR2(20));
38
39
40
```

The results tab shows the following data for the ACCOUNT table:

ACC_NO	NAME	CITY	BALANCE	LOAN_TAKEN	ADDRESS
A001	Patel Hiren	Mehsana	50000	YES	-
A002	Patel Ramesh	Mehsana	50000	YES	-
A003	Dave Hardik	Ahmedabad	75000	NO	-
A004	Soni Hetal	Ahmedabad	100000	NO	-
A005	Kothari Nehal	Patan	100000	YES	-

5 rows returned in 0.01 seconds

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



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

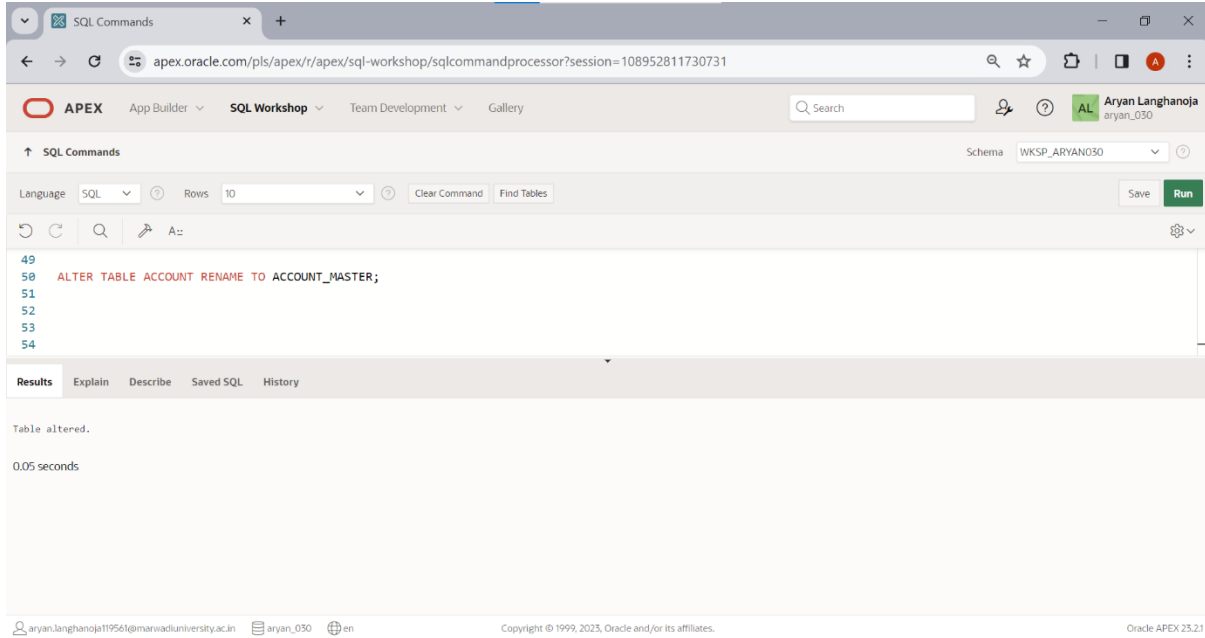
```
42
43 CREATE TABLE ACCOUNT_TEMP AS
44 SELECT acc_no, Name, Balance
45 FROM ACCOUNT;
46
47 SELECT * FROM ACCOUNT_TEMP;
```

The results tab shows the following data for the ACCOUNT_TEMP table:

ACC_NO	NAME	BALANCE
A001	Patel Hiren	50000
A004	Soni Hetal	100000
A002	Patel Ramesh	50000
A003	Dave Hardik	75000
A005	Kothari Nehal	100000

5 rows returned in 0.01 seconds

6. Rename the table ACCOUNT to ACCOUNT_MASTER.

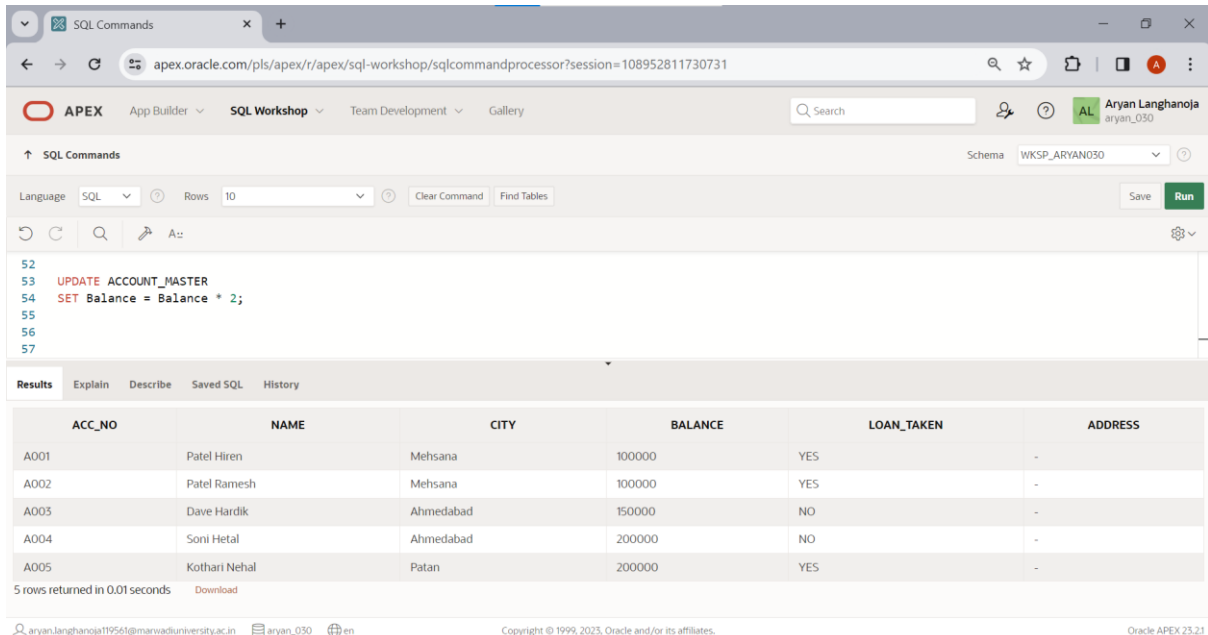


The screenshot shows the APEX SQL Workshop interface. The SQL command entered is:

```
ALTER TABLE ACCOUNT RENAME TO ACCOUNT_MASTER;
```

The command was executed successfully, and the results pane shows "Table altered." and "0.05 seconds".

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



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

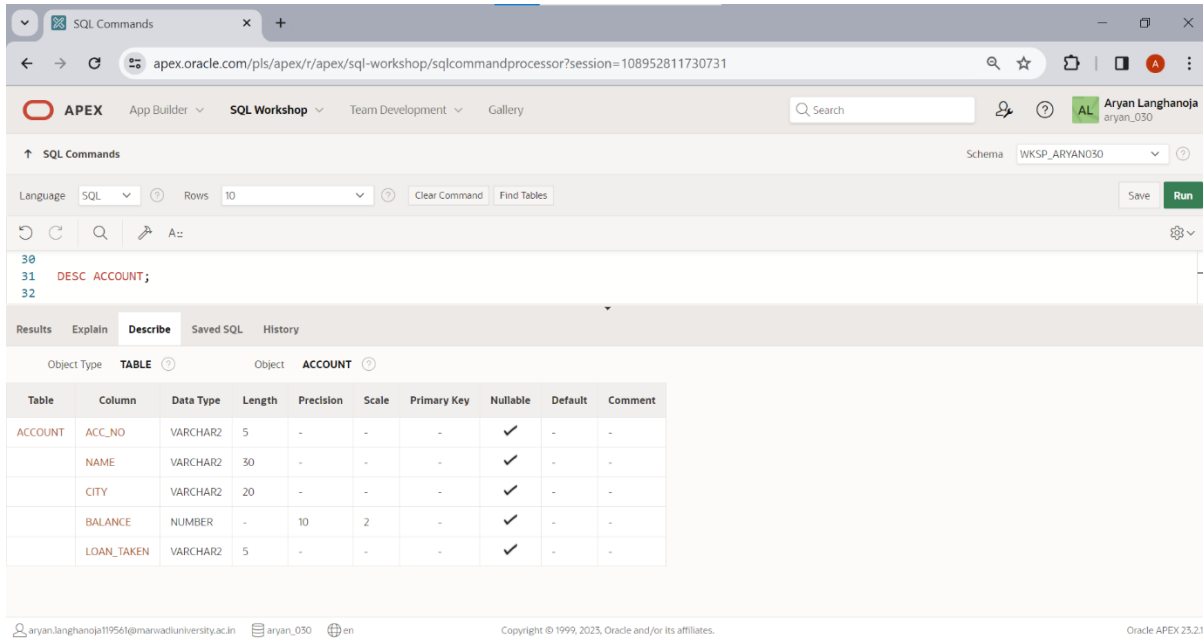
```
UPDATE ACCOUNT_MASTER  
SET Balance = Balance * 2;
```

The command was executed successfully. Below the command, the results pane displays a table with 5 rows:

ACC_NO	NAME	CITY	BALANCE	LOAN_TAKEN	ADDRESS
A001	Patel Hiren	Mehsana	100000	YES	-
A002	Patel Ramesh	Mehsana	100000	YES	-
A003	Dave Hardik	Ahmedabad	150000	NO	-
A004	Soni Hetal	Ahmedabad	200000	NO	-
A005	Kothari Nehal	Patan	200000	YES	-

5 rows returned in 0.01 seconds

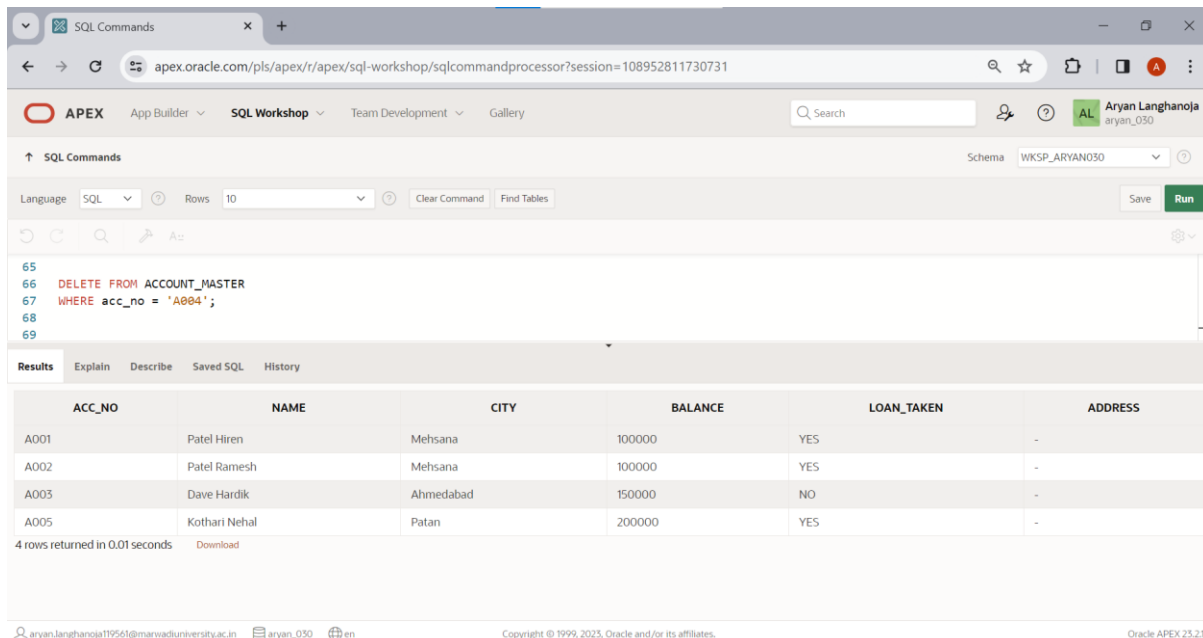
8. Describe the structure of table ACCOUNT.



The screenshot shows the Oracle APEX SQL Workshop interface. The SQL Command is `DESC ACCOUNT;`. The results tab is selected, showing the structure of the ACCOUNT table.

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	-	-	-	✓	-	-

9. Delete the records whose account no is A004.



The screenshot shows the Oracle APEX SQL Workshop interface. The SQL Command is `DELETE FROM ACCOUNT_MASTER WHERE acc_no = 'A004';`. The results tab is selected, showing the data after the deletion.

ACC_NO	NAME	CITY	BALANCE	LOAN_TAKEN	ADDRESS
A001	Patel Hiren	Mehsana	100000	YES	-
A002	Patel Ramesh	Mehsana	100000	YES	-
A003	Dave Hardik	Ahmedabad	150000	NO	-
A005	Kothari Nehal	Patan	200000	YES	-

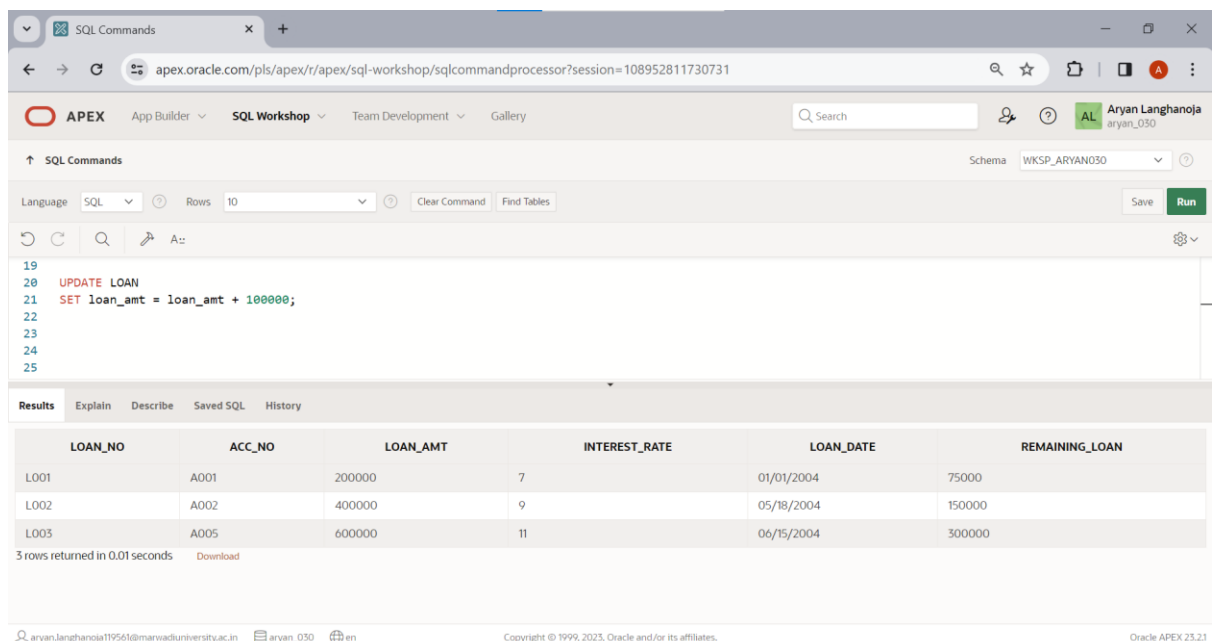
4 rows returned in 0.01 seconds

Table: **LOAN.**

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

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

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



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

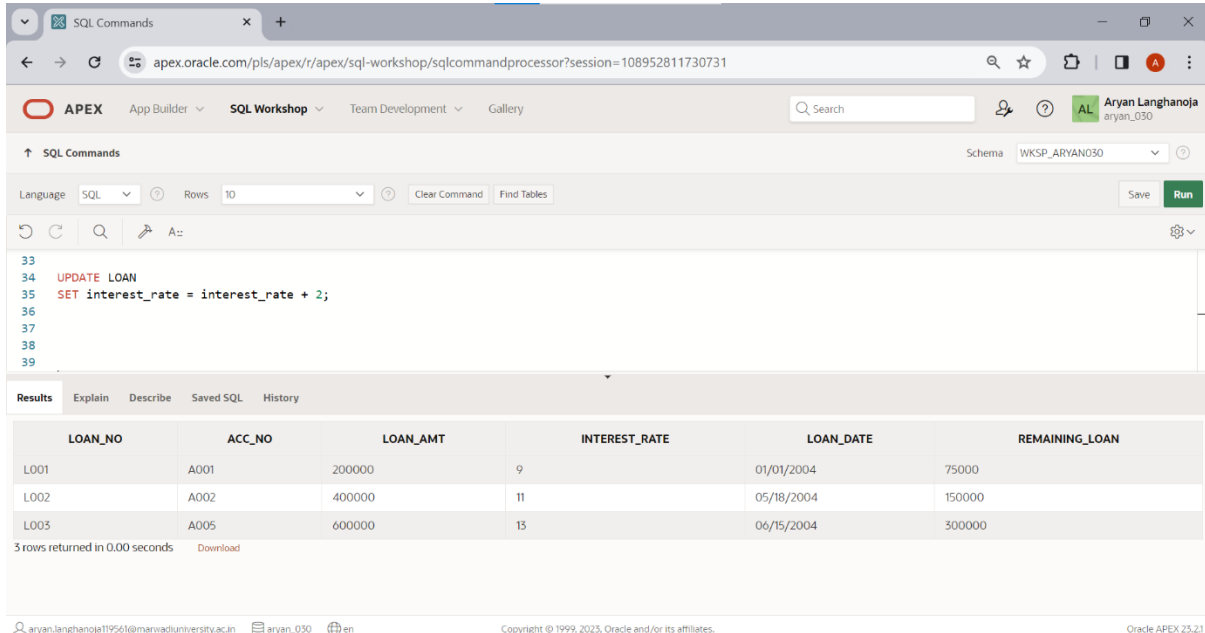
```
UPDATE LOAN
SET loan_amt = loan_amt + 100000;
```

The results table shows the following data:

LOAN_NO	ACC_NO	LOAN_AMT	INTEREST_RATE	LOAN_DATE	REMAINING_LOAN
L001	A001	200000	7	01/01/2004	75000
L002	A002	400000	9	05/18/2004	150000
L003	A005	600000	11	06/15/2004	300000

3 rows returned in 0.01 seconds

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



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

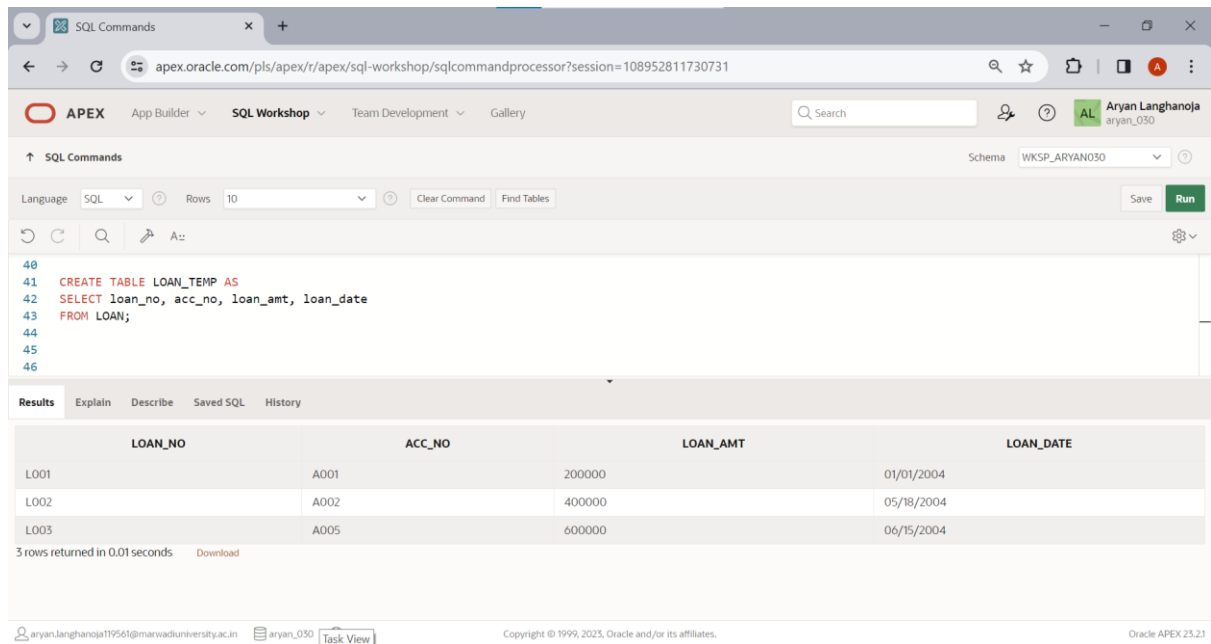
```
33
34 UPDATE LOAN
35 SET interest_rate = interest_rate + 2;
36
37
38
39
```

The results table shows the following data:

LOAN_NO	ACC_NO	LOAN_AMT	INTEREST_RATE	LOAN_DATE	REMAINING_LOAN
L001	A001	200000	9	01/01/2004	75000
L002	A002	400000	11	05/18/2004	150000
L003	A005	600000	13	06/15/2004	300000

3 rows returned in 0.00 seconds

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



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

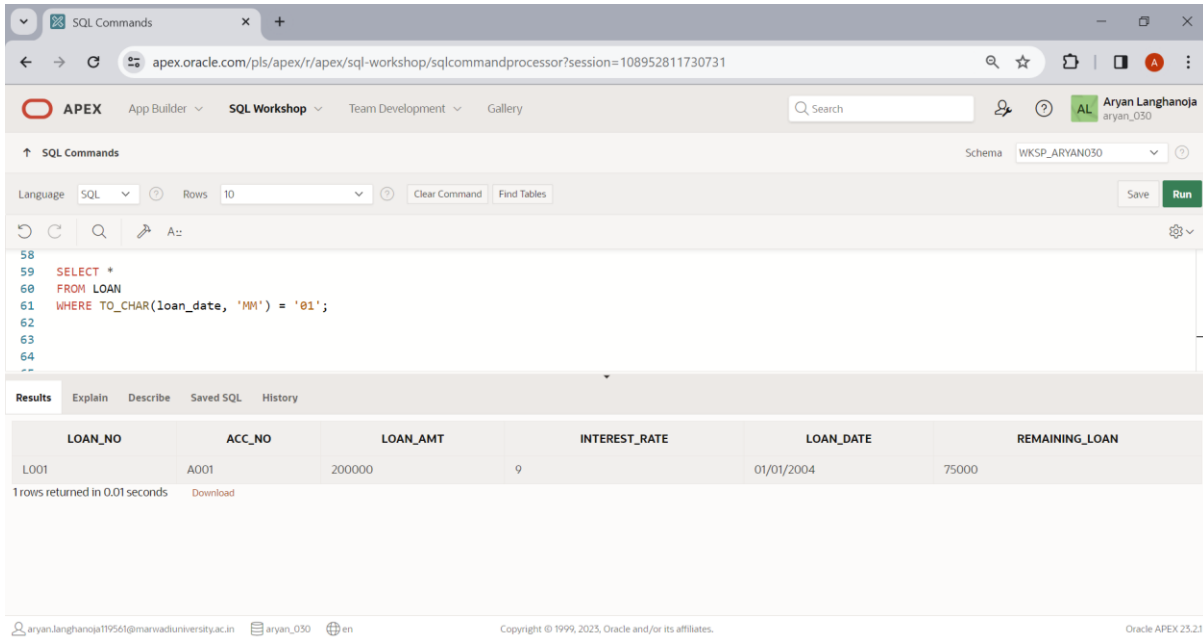
```
40
41 CREATE TABLE LOAN_TEMP AS
42 SELECT loan_no, acc_no, loan_amt, loan_date
43 FROM LOAN;
44
45
46
```

The results table shows the following data:

LOAN_NO	ACC_NO	LOAN_AMT	LOAN_DATE
L001	A001	200000	01/01/2004
L002	A002	400000	05/18/2004
L003	A005	600000	06/15/2004

3 rows returned in 0.01 seconds

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



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

```

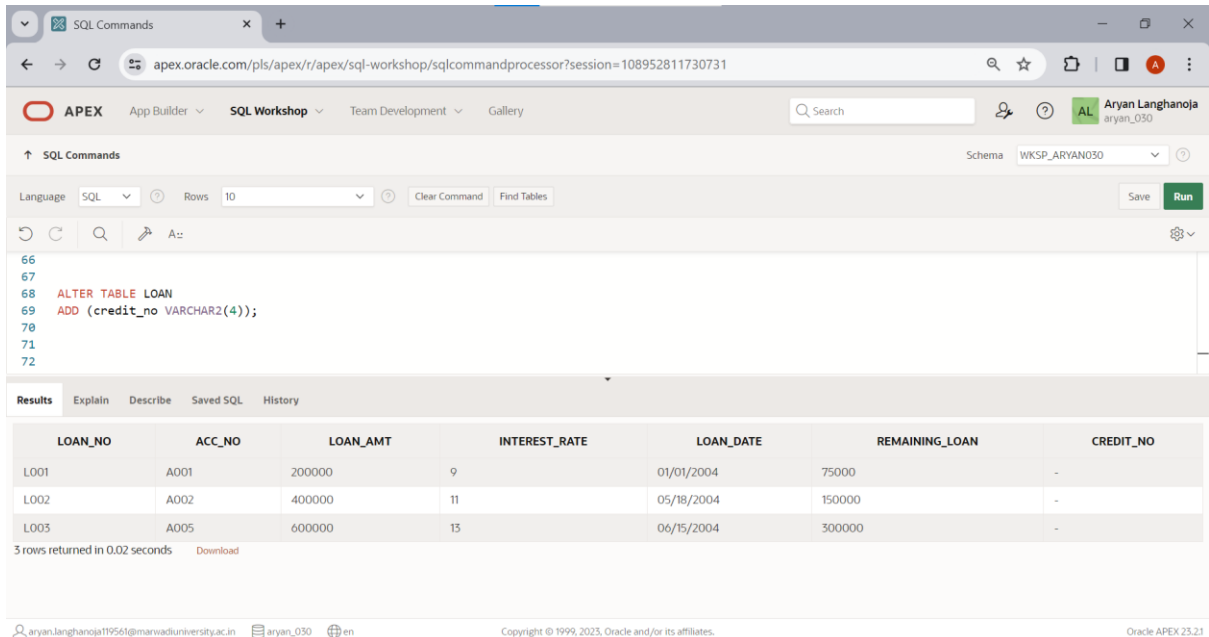
58 SELECT *
59 FROM LOAN
60 WHERE TO_CHAR(loan_date, 'MM') = '01';
61
62
63
64

```

The results tab shows 1 row returned in 0.01 seconds:

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

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



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

```

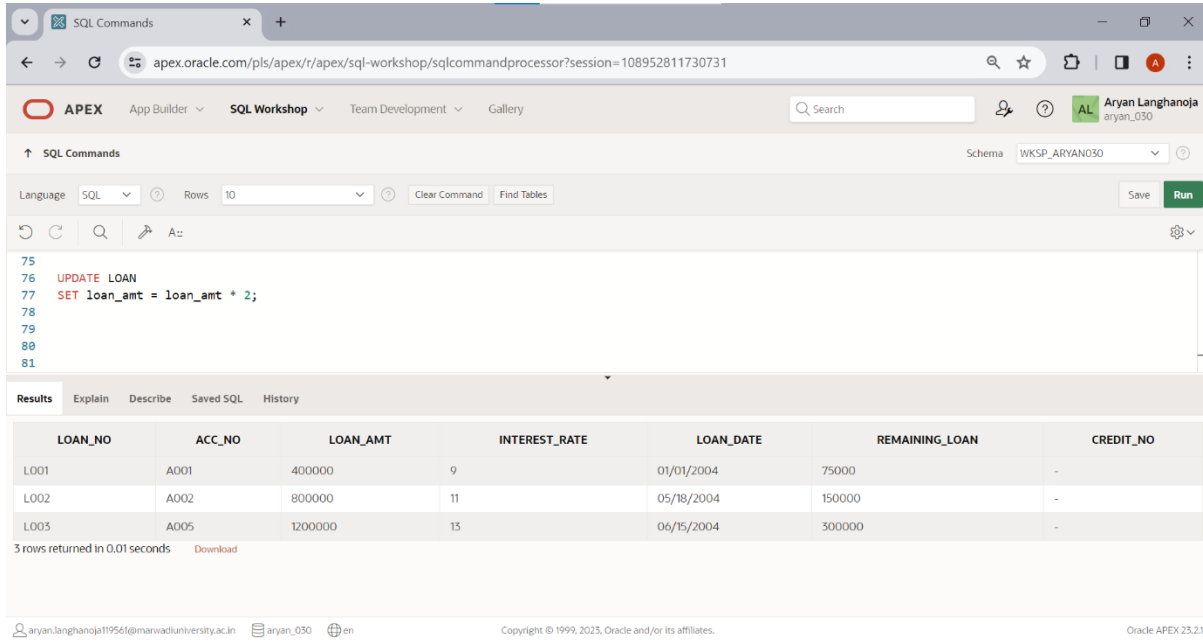
66
67
68 ALTER TABLE LOAN
69 ADD (credit_no VARCHAR2(4));
70
71
72

```

The results tab shows 3 rows returned in 0.02 seconds:

LOAN_NO	ACC_NO	LOAN_AMT	INTEREST_RATE	LOAN_DATE	REMAINING_LOAN	CREDIT_NO
L001	A001	200000	9	01/01/2004	75000	-
L002	A002	400000	11	05/18/2004	150000	-
L003	A005	600000	13	06/15/2004	300000	-

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



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

```

75
76 UPDATE LOAN
77 SET loan_amt = loan_amt * 2;
78
79
80
81

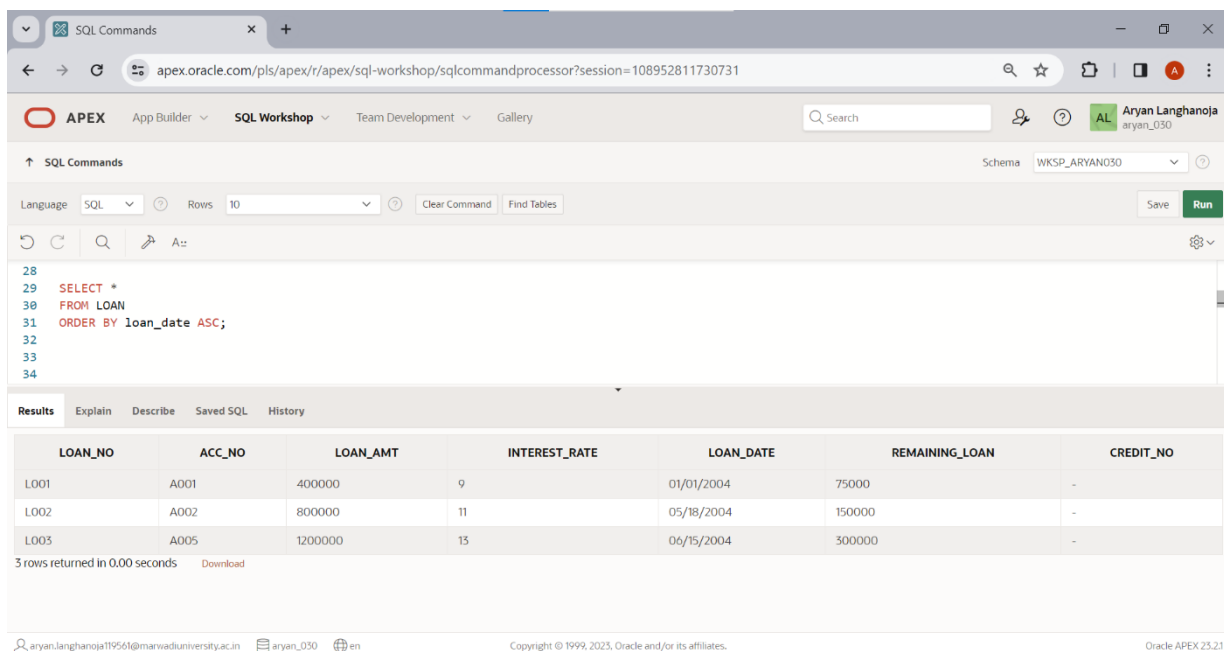
```

The results tab shows the following data:

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

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



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

```

28
29 SELECT *
30 FROM LOAN
31 ORDER BY loan_date ASC;
32
33
34

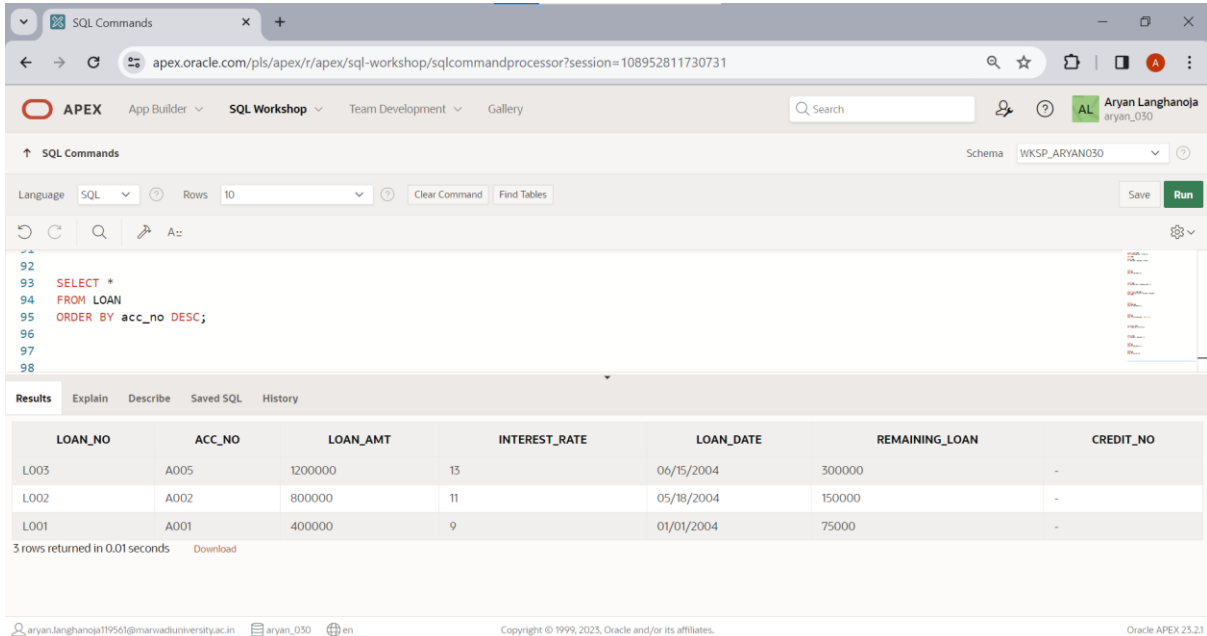
```

The results tab shows the following data:

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 0.00 seconds

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



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

```

92
93 SELECT *
94 FROM LOAN
95 ORDER BY acc_no DESC;
96
97
98

```

The results are displayed in a table with the following columns: LOAN_NO, ACC_NO, LOAN_AMT, INTEREST_RATE, LOAN_DATE, REMAINING_LOAN, and CREDIT_NO. The results show 3 rows of data.

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