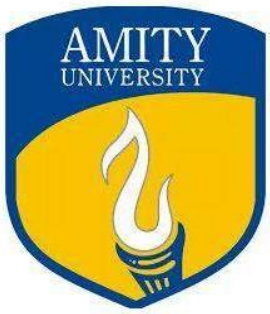
Database Management System

CSE201

PRACTICAL FILE

Submitted to the

Amity University Uttar Pradesh



Submitted by:

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DEPARTMENT OF INFORMATION TECHNOLOGY

AMITY SCHOOL OF ENGINEERING AND TECHNOLOGY

AMITY UNIVERSITY UTTAR PRADESH

2022

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S.N0.	NAME OF EXPERIMENT	DATE OF EXPERIMENT	DATE OF SUBMISSION	FACULTY'S SIGNATURE
1.	Write a query in SQL to display the last name and job title of all employees who do not have a manager.			
2.	Write a query in SQL to display the last name, salary, and commission of all employees who earn commissions. Sort data in descending order of salary and commissions.			
3.	Write a query in SQL that prompts the user for a manager ID and generates the employee ID, last name, salary, and department for that manager's employees. The HR department wants the ability to sort the report on a selected column.			
4.	Write a query in SQL to Display all employee last names in which the third letter of the name is *a*.			
5.	Write a query in SQL to Display the last name of all employees who have both an *a* and an *e* in their last name.			
6.	Write a query in SQL to Display the last name, job, and salary for all employees whose job is sales representative or stock clerk and whose salary is not equal to $2,500, $3,500, or $7,000.			
7.	Write a query in SQL to display the employee number, last name, salary, and salary increased by 15.5% (expressed as a whole number) for each employee. Label the column New Salary.			

8.	Create a report that produces the following for each employee: <employee last name> earns <salary> monthly but wants <3 times salary>. Label the column Dream Salaries.			
9.	Create a query to display the last name and salary for all employees. Format the salary to be 15 characters long, left-padded with the $ symbol. Label the column SALARY.			
10.	E1 and E2 are two tables,write a query to display employee first name from E1 in upper case and label it as employee name.			
11.	Write a query retrieve the first character of employee last name from the table.			
12.	write a query to retrieve employee first name and last name in single column as full name where full name should be separated with space.			
13.	Write a query to display the records that are present in one table but not in another table.			
14.	Write a query to find the third highest salary from table.			

THEORY:

SQL – structured query language.

RDBMS - A database management system that manages data as a collection of tables in which all relationships are represented by common values in related tables.

PURPOSE OF SQL-

- SQL is used to communicate with a database. According to ANSI (American National Standards Institute), it is the standard language for relational database management systems.
- SQL statements are used to perform tasks such as update data on a database, or retrieve data from a database. Some common relational database management systems that use SQL are: Oracle, Sybase, Microsoft SQL Server, Microsoft Access, Ingres, etc.

DBMS LANGUAGES –

Data Definition Language (DDL)-

DDL is used for specifying the database schema. It is used for creating tables, schema, indexes, constraints etc. in database. Lets see the operations that we can perform on database using DDL:

1. To create the database instance – **CREATE**
2. To alter the structure of database – **ALTER**
3. To drop database instances – **DROP**
4. To delete tables in a database instance – **TRUNCATE**
5. To rename database instances – **RENAME**
6. To drop objects from database such as tables – **DROP**
7. To Comment – **Comment**

All of these commands either defines or update the database schema that's why they come under Data Definition language.

Data Manipulation Language (DML)-

1. DML is used for accessing and manipulating data in a database. The following operations on database comes under DML:

   A. To read records from table(s) – **SELECT**

   B. To insert record(s) into the table(s) – **INSERT**

C. Update the data in table(s) – **UPDATE**
D. Delete all the records from the table – **DELETE**

Data Control language (DCL)-

DCL is used for granting and revoking user access on a database –

1. To grant access to user – GRANT
2. To revoke access from user – REVOKE

Transaction Control Language(TCL)-

The changes in the database that we made using DML commands are either performed or rollbacked using TCL.

1. To persist the changes made by DML commands in database – COMMIT
2. To rollback the changes made to the database – ROLLBACK

Some of The Most Important SQL Commands-

- SELECT - extracts data from a database
- UPDATE - updates data in a database
- DELETE - deletes data from a database
- INSERT INTO - inserts new data into a database
- CREATE DATABASE - creates a new database
- ALTER DATABASE - modifies a database
- CREATE TABLE - creates a new table
- ALTER TABLE - modifies a table
- DROP TABLE - deletes a table
- CREATE INDEX - creates an index (search key)
- DROP INDEX - deletes an index .

SYNYAX FOR THE COMMANDS-

1. CREATE TABLE COMMAND-

CREATE TABLE table_name(

column1 datatype,
column2 datatype,
column3 datatype,
.....

columnN datatype,
PRIMARY KEY(one or more columns));

2. UPDATE TABLE COMMAND -

UPDATE *table_name*
SET *column1 = value1, column2 = value2, ...*
WHERE *condition*;

3.DELETE COMMAND –

DELETE FROM Customers WHERE CustomerName= 'NEWTON';

4.INSERT COMMAND-

INSERT INTO table_name *(*column1, column2, column3, ...*)*
*VALUES(*value1, value2, value3, ...*);*

5.ALTER TABLE COMMAND-

ALTER TABLE table_name ADD column_name datatype;

6.DROP TABLE COMMAND-

DROP TABLE Shippers;

7.CREATE INDEX COMMAND-

CREATE INDEX idx_lastname
ON Persons (LastName);

*8.*DROP INDEX COMMAND-

DROP INDEX *index_name* ON *table_name*;

EXPERIMENT-01

AIM - Write a query in SQL to display the last name and job title of all employees who do not have a manager.

PLATFORM USED –

Oracle.

COMMANDS USED –

1.CREATE TABLE COMMAND

```
CREATE TABLE BUSINESS
(
ID INT PRIMARY KEY,
FIRST_NAME VARCHAR(10),
LAST_NAME VARCHAR(20),
JOB TITLE VARCHAR(30),
MANAGER VARCHAR(40)
);
```

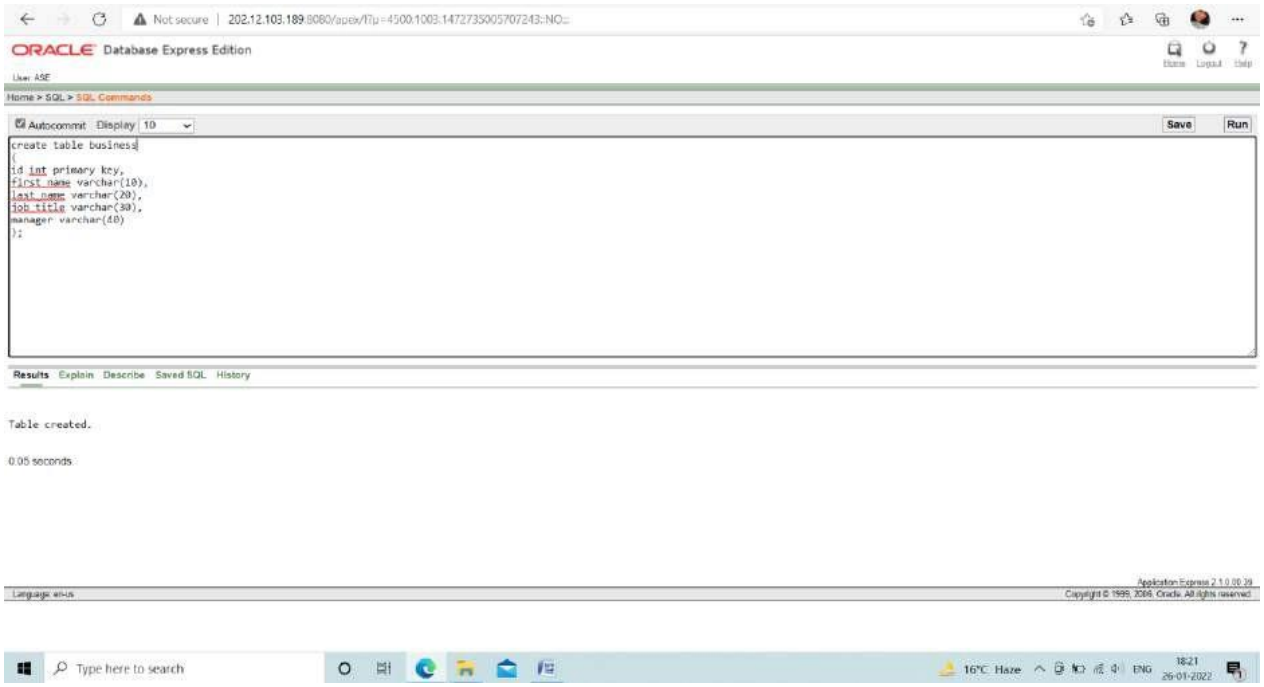
2.INSERT COMMAND –

```
INSERT INTO BUSINESS(ID,FIRST_NAME,LAST_NAME,JOB_TITLE,MANAGER)
VALUES(06,'AMIT','BANDA','CIO','JACKSON');
```

3.SELECT COMMAND-

```
SELECT LAST_NAME,JOB TITLE FROM BUSINESS WHERE MANAGER = '-'
```

OUTPUTS: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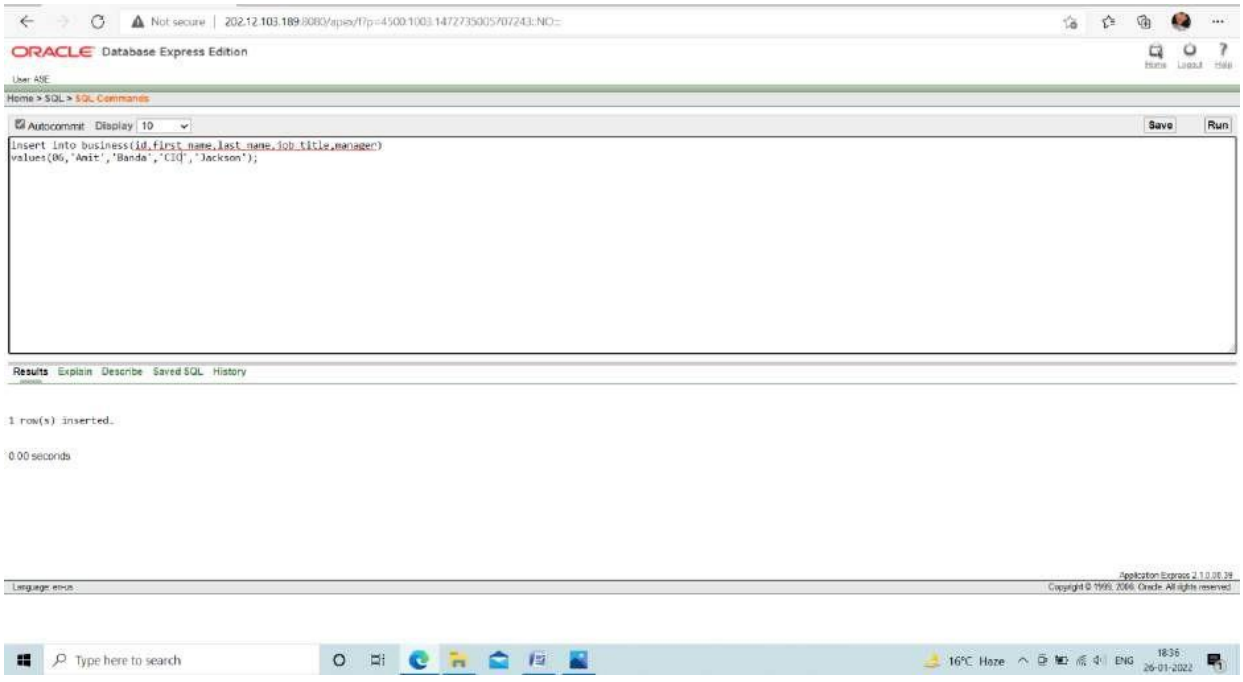
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
create table business
(
id int primary key,
first_name varchar(10),
last_name varchar(20),
job_title varchar(30),
manager varchar(40)
);
Results Explain Describe Saved SQL History
Table created.
0.05 seconds
Application Express 2.1.0.00.39
Language: en-us
Copyright © 1999, 2006, Oracle. All rights reserved.
Type here to search
16°C Haze
ENG
18:21
26-01-2022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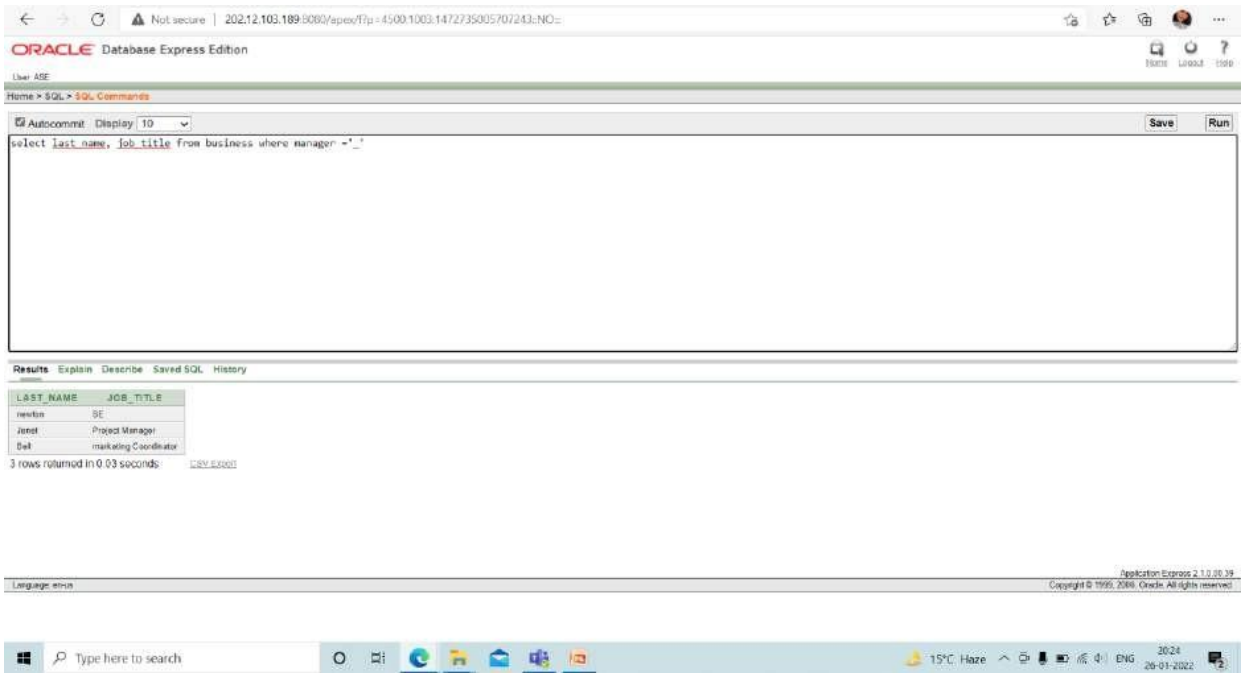
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
insert into business(id,first_name,last_name,job_title,manager)
values(06,'Amit','Banda','CIO','Jackson');
Results Explain Describe Saved SQL History
1 row(s) inserted.
0.00 seconds
Application Express 2.1.0.00.39
Language: en-us
Copyright © 1999, 2006, Oracle. All rights reserved.
Type here to search
16°C Haze
ENG
18:36
26-01-2022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ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
select last_name, job_title from business where manager ='_'
Results Explain Describe Saved SQL History
LAST_NAME JOB_TITLE
newton SE
Janet Project Manager
Bell marketing Coordinator
3 rows returned in 0.03 seconds CSV Export
Application Express 21.0.0.0.39
Language: en-us
Copyright © 1999, 2020, Oracle. All rights reserved.

Type here to search
15°C Haze
ENG
20:24
26-01-2022

EXPERIMENT-02

AIM - Write a query in SQL to display the last name, salary, and commission of all employees who earn commissions. Sort data in descending order of salary and commissions.

PLATFORM USED –

Oracle.

COMMANDS USED –

1.CREATE TABLE COMMAND-

```
CREATE TABLE AUTHOR
(
ID INT PRIMARY KEY,
FIRST_NAME VARCHAR(10),
LAST_NAME VARCHAR(20),
SALARY INT,
COMMISSION INT
);
```

2.INSERT VALUES COMMAND-

```
INSERT INTO AUTHOR(ID,FIRST_NAME,LAST_NAME,SALARY, COMMISSION)
VALUES(01,'MORRIS','MANO',3000,1500);
```

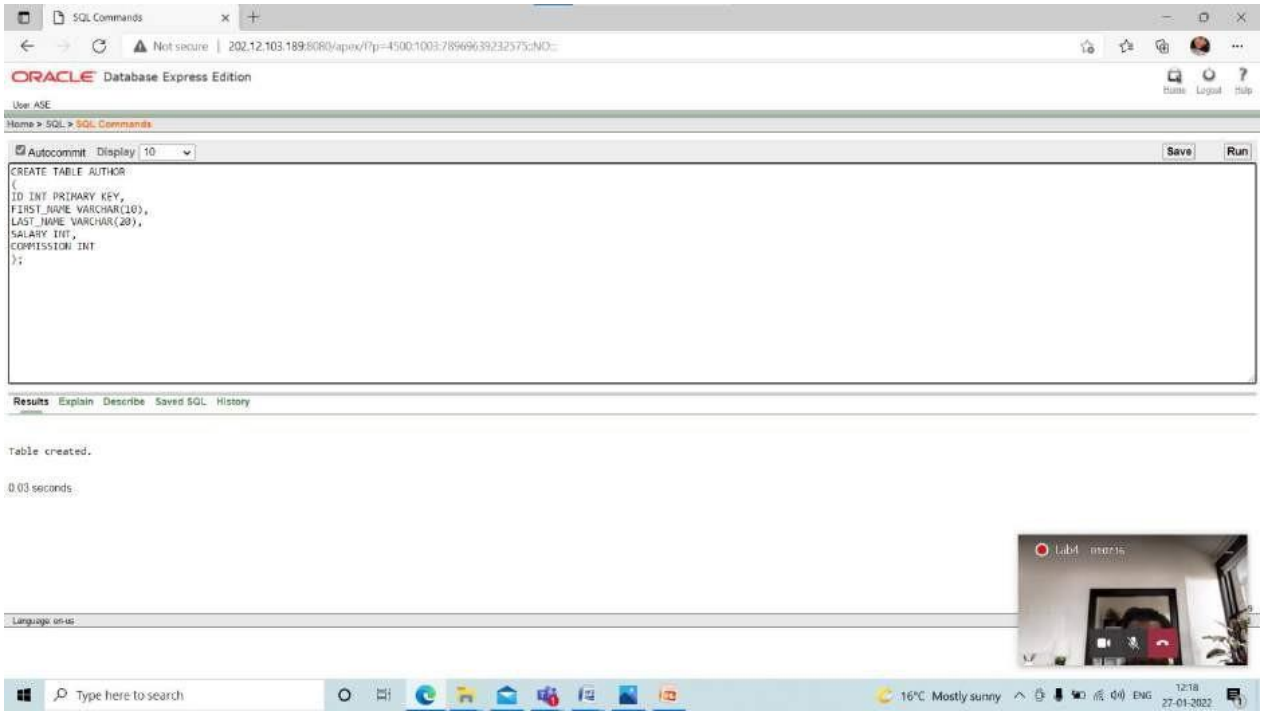
3.SELECT COMMAND-

```
SELECT *FROM AUTHOR;
AND
SELECT LAST_NAME, SALARY, COMMISSION FROM AUTHOR WHERE COMMISSION>0;
```

4.DESC COMMAND-

```
SELECT SALARY, COMMISSION FROM AUTHOR ORDER BY ID DESC;
```

OUTPUTS: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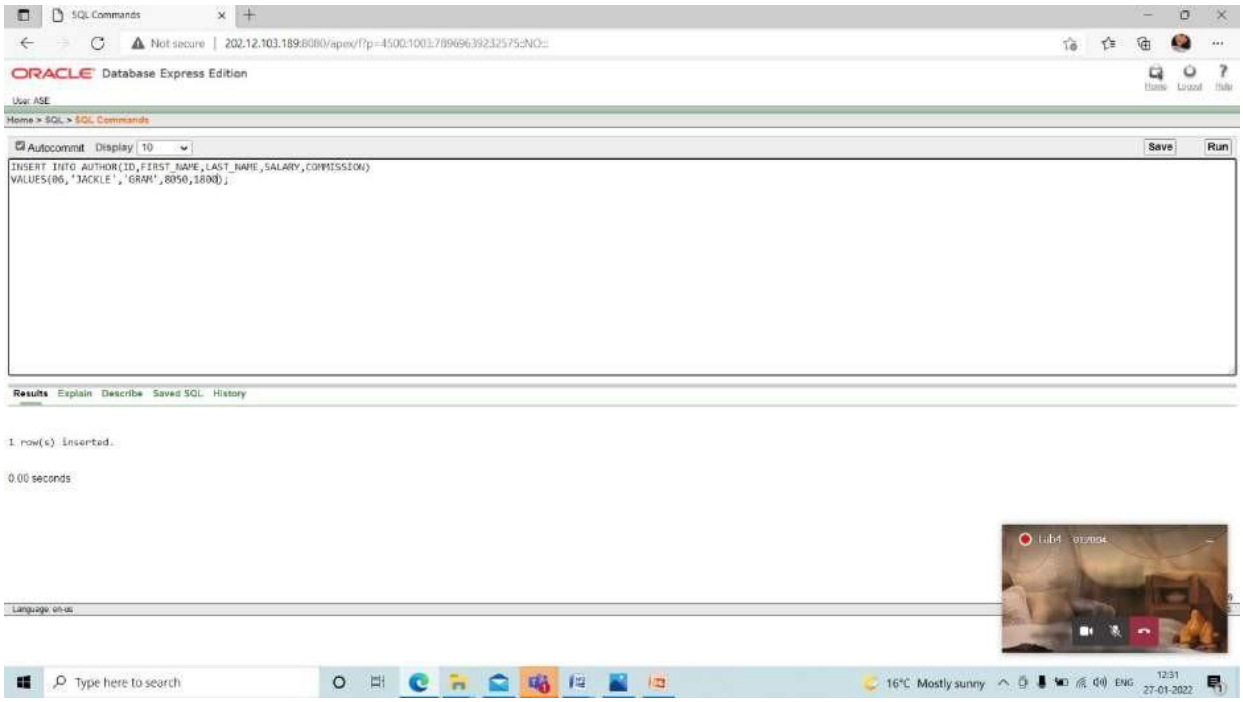
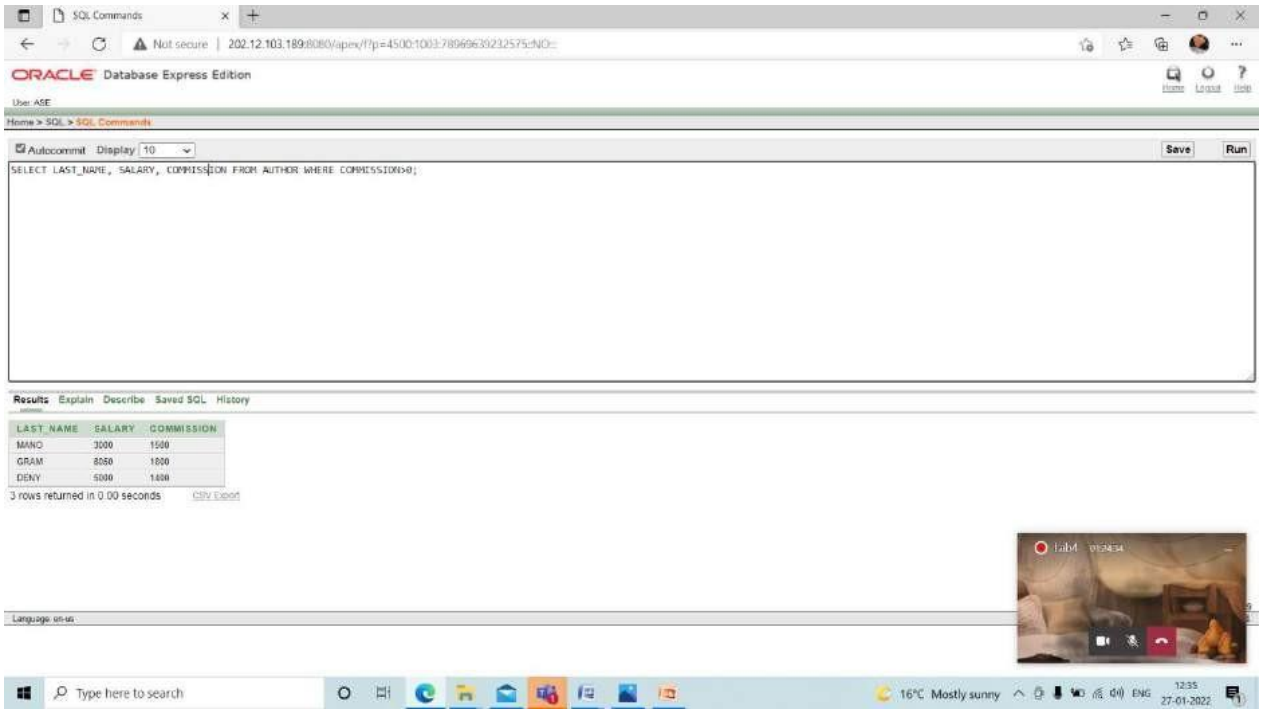
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
CREATE TABLE AUTHOR
(
ID INT PRIMARY KEY,
FIRST_NAME VARCHAR(10),
LAST_NAME VARCHAR(20),
SALARY INT,
COMMISSION INT
);
Results Explain Describe Saved SQL History
Table created.
0.03 seconds
Language: en-us
Type here to search
16°C Mostly sunny
ENG
12:18
27-01-2022


SQL Commands
Not secure | 202.12.103.189:8080/apex/f?p=4500:1003:7896963923257 5:NO::
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
INSERT INTO AUTHOR(ID,FIRST_NAME,LAST_NAME,SALARY,COMMISSION)
VALUES(06,'JACKLE','GRAN',8050,1800);
Results Explain Describe Saved SQL History
1 row(s) inserted.
0.00 seconds
Language: en-us
Type here to search
16°C Mostly sunny
ENG
12:31
27-01-2022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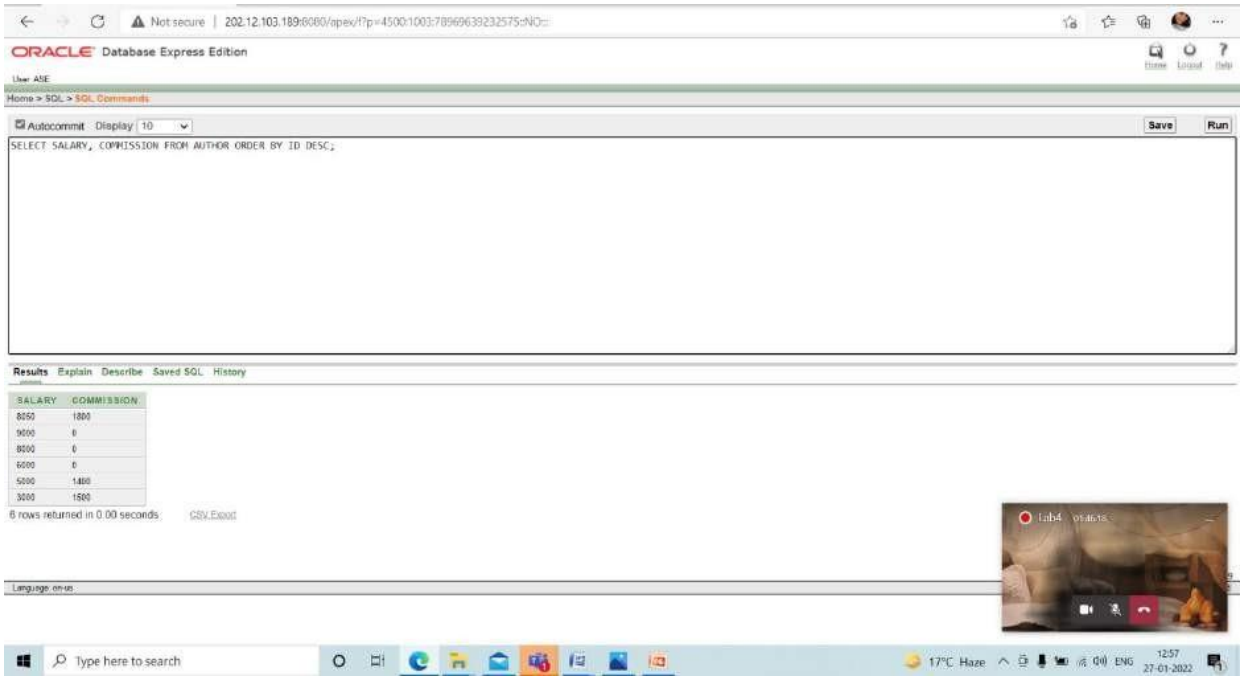
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
SELECT LAST_NAME, SALARY, COMMISSION FROM AUTHOR WHERE COMMISSION>0;
Results Explain Describe Saved SQL History
LAST_NAME SALARY COMMISSION
MANO 3000 1500
GRAM 8050 1800
DENY 5000 1400
3 rows returned in 0.00 seconds
CSV Export
Language: en-us
Type here to search
16°C Mostly sunny
ENG
12:55
27-01-2022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ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
SELECT SALARY, COMMISSION FROM AUTHOR ORDER BY ID DESC;
Results Explain Describe Saved SQL History
SALARY COMMISSION
8050 1800
9000 0
8000 0
6000 0
5000 1400
3000 1500
6 rows returned in 0.00 seconds
CSV Export
Language: en-us
Type here to search
17°C Haze
ENG
12:57
27-01-2022

EXPERIMENT-03

AIM - Write a query in SQL that prompts the user for a manager ID and generates the employee ID, last name, salary, and department for that manager's employees. The HR department wants the ability to sort the report on a selected column.

PLATFORM USED –

Oracle.

COMMANDS USED –

1.CREATE TABLE COMMAND-

```
CREATE TABLE MODEL
(
MAN_ID INT PRIMARY KEY,
FIRST_NAME VARCHAR(10),
LAST_NAME  VARCHAR(20),
SALARY INT
);
```

AND

```
CREATE TABLE PRODUCER
(
EMP_ID INT PRIMARY KEY,
FIRST_NAME VARCHAR(10),
LAST_NAME VARCHAR(20),
EMP_SALARY INT,
EMP_DEPT VARCHAR(30),
MAN_ID INT
);
```

2.INSERT COMMAND-

INSERT INTO MODEL(MAN_ID,FIRST_NAME,LAST_NAME,SALARY)

VALUES(01,'AVANTIKA','GUPTA',50000);

AND

INSERT INTO PRODUCER(EMP_ID,FIRST_NAME,LAST_NAME,EMP_SALARY,EMP_DEPT,MAN_ID,)

VALUES(01,'ISHA','DOGRA',50000,'IT',06);

3.SELECT COMMAND-

SELECT *FROM MODEL;

AND

SELECT *FROM MODEL;

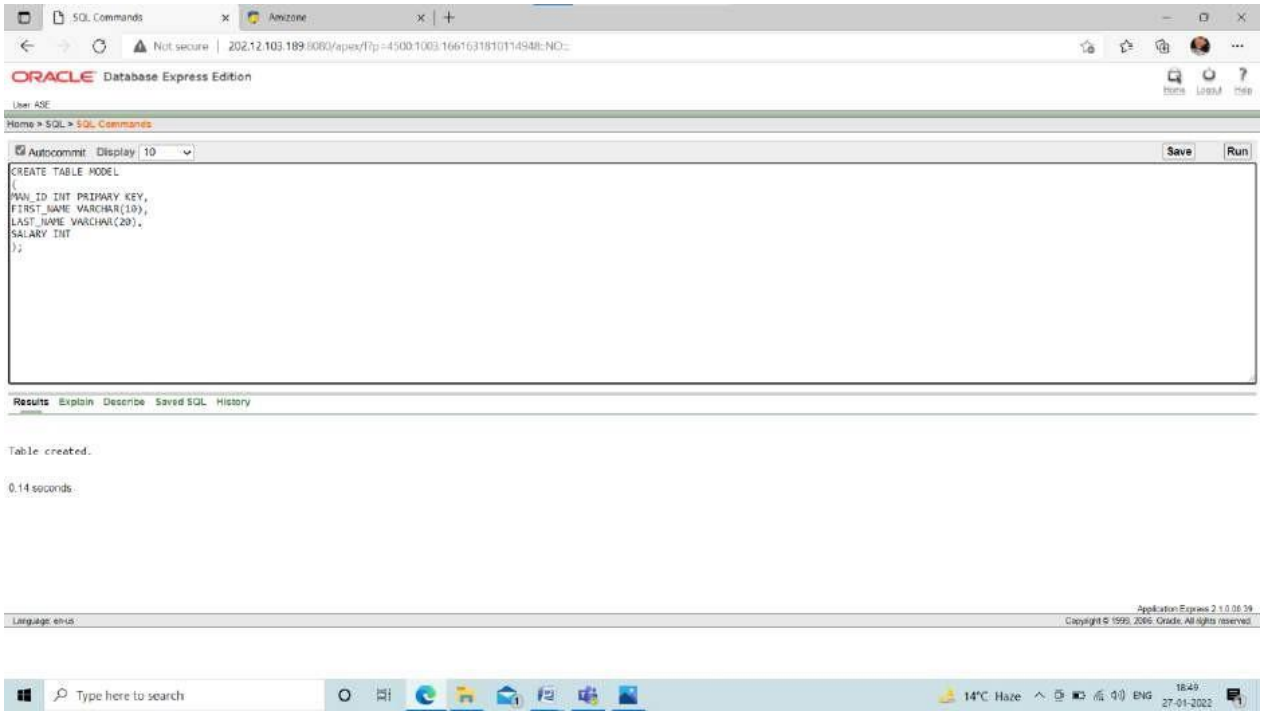
4.REQUIRED SQL-

SELECT EMP_ID,FIRST_NAME,LAST_NAME,EMP_SALARY,EMP_DEPT FROM PRODUCER WHERE MAN_ID = 8;

AND

SELECT EMP_ID, FIRST_NAME,LAST_NAME,MAN_ID,EMP_SALARY FROM PRODUCER ORDER BY MAN_ID DESC;

OUTPUTS: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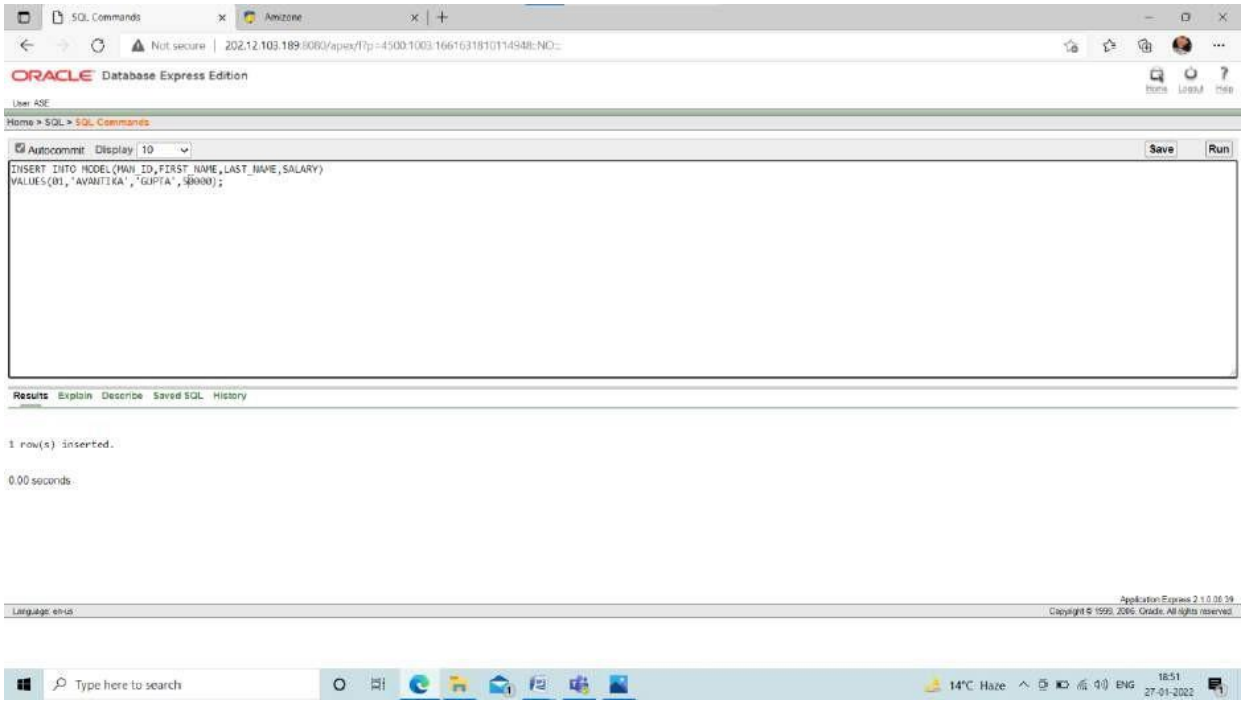
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
CREATE TABLE MODEL
(
MAN_ID INT PRIMARY KEY,
FIRST_NAME VARCHAR(10),
LAST_NAME VARCHAR(20),
SALARY INT
);
Results Explain Describe Saved SQL History
Table created.
0.14 seconds
Application Express 2.1.0.00.39
Language: en-us
Copyright © 1999, 2006, Oracle. All rights reserved.
Type here to search
14°C Haze
ENG
18:49
27-01-2022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Amizone
Not secure
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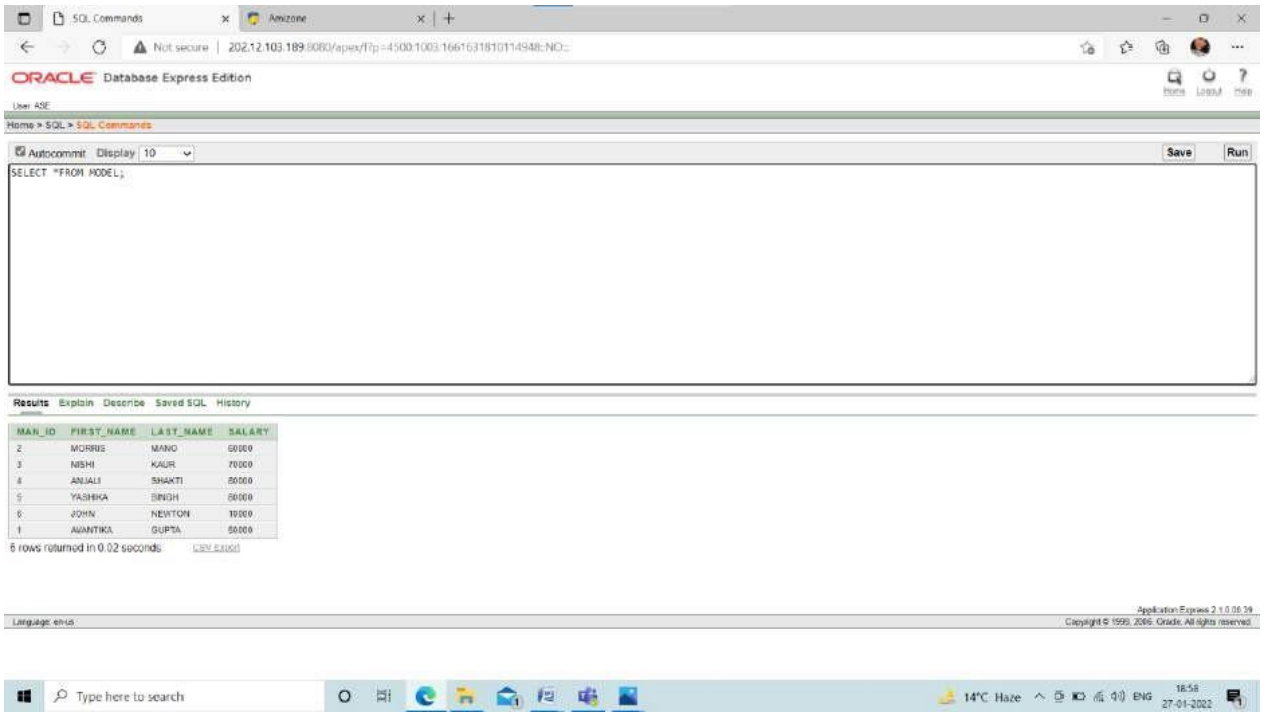
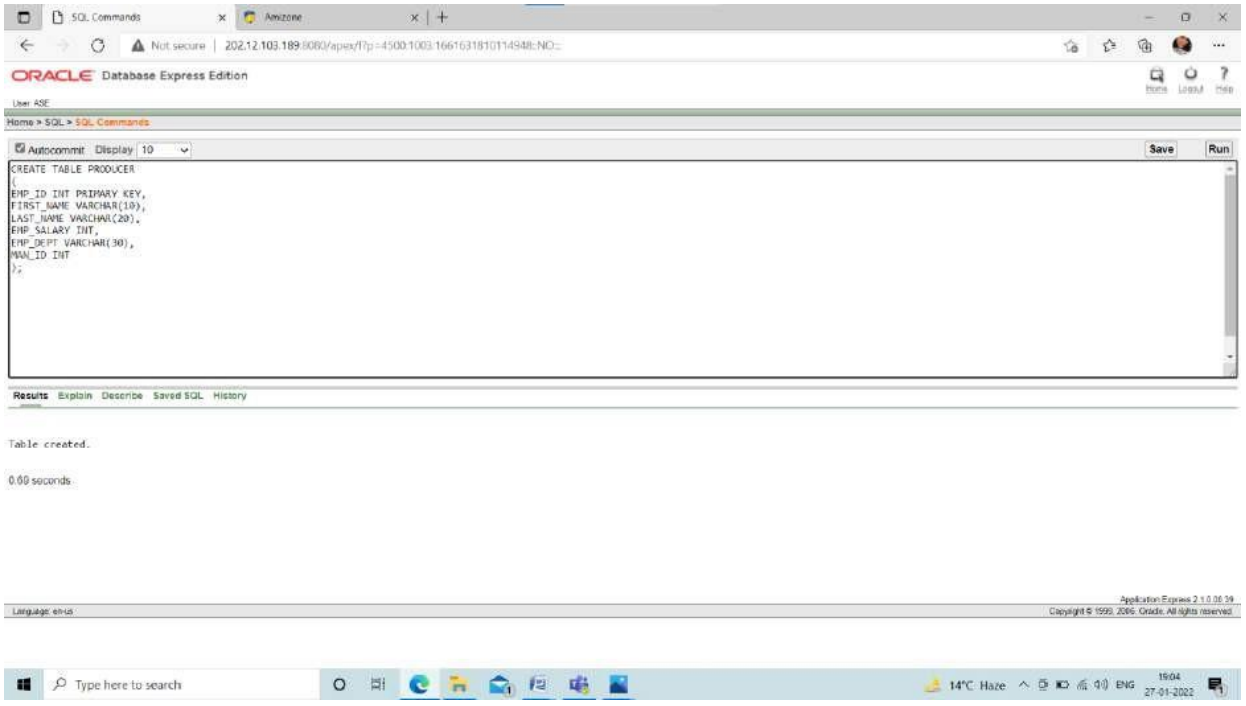
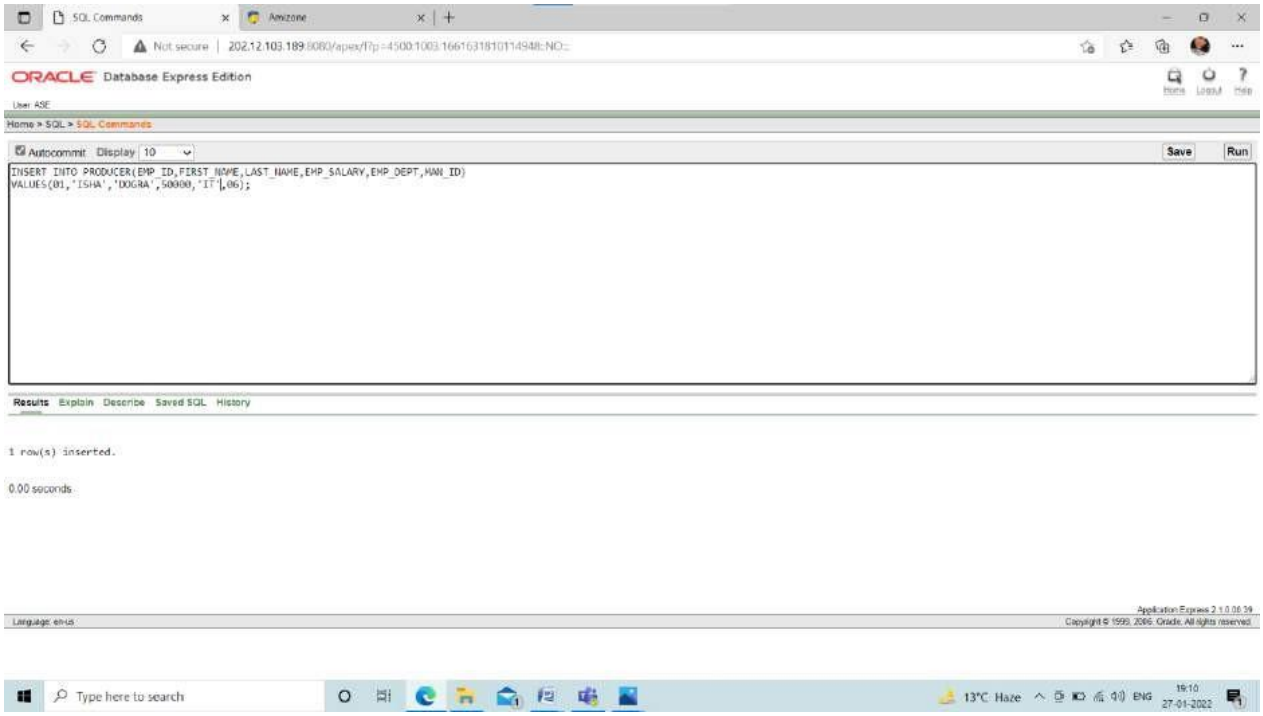
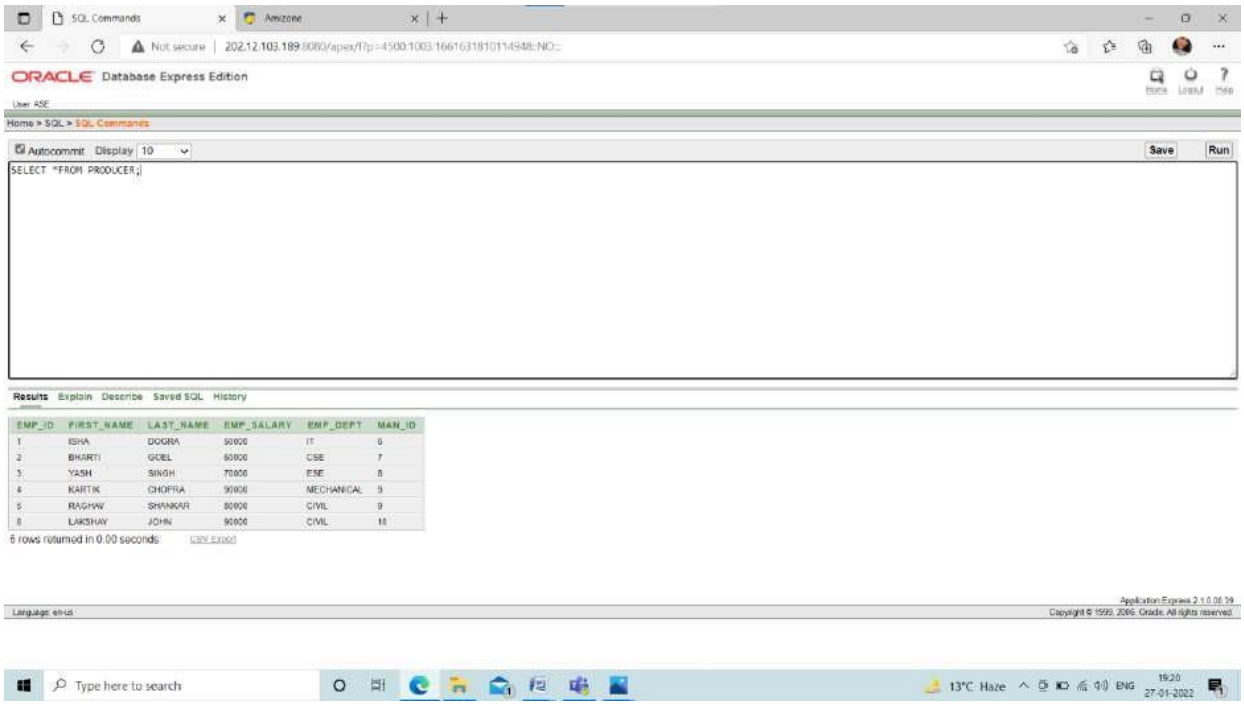
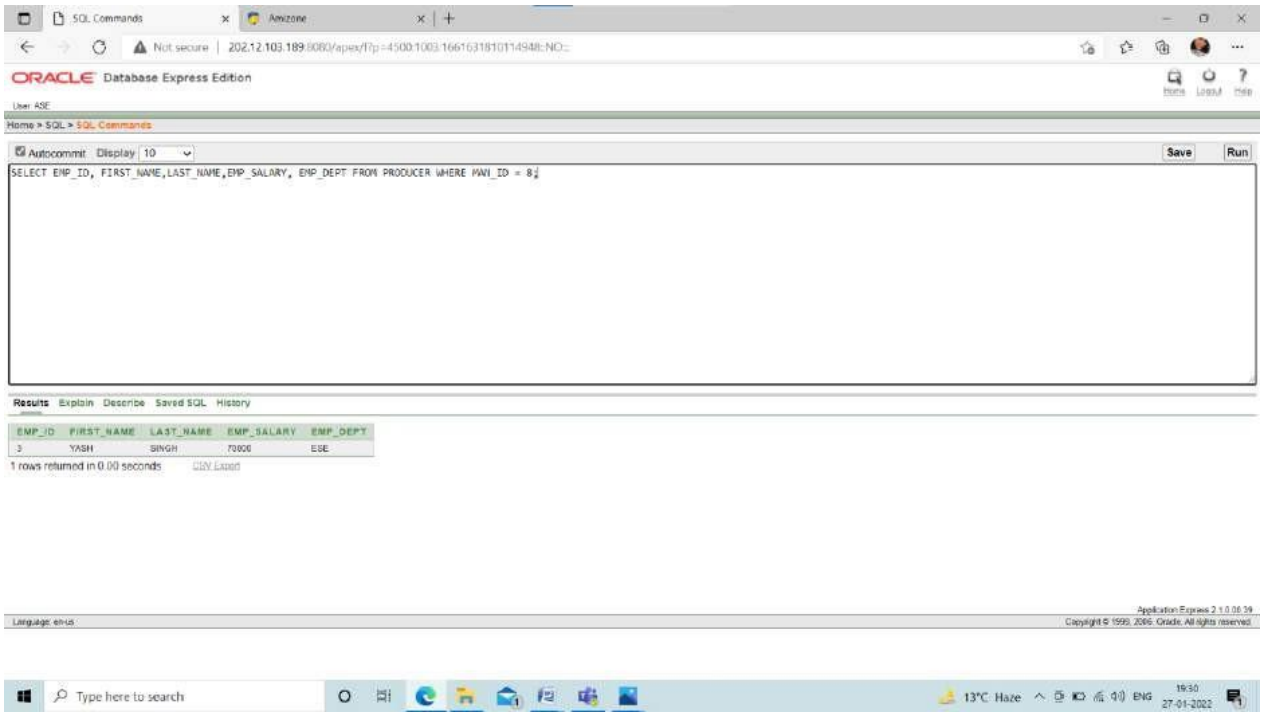
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
INSERT INTO MODEL(MAN_ID,FIRST_NAME,LAST_NAME,SALARY)
VALUES(01,'AVANTIKA','GUPTA',50000);
Results Explain Describe Saved SQL History
1 row(s) inserted.
0.00 seconds
Application Express 2.1.0.00.39
Language: en-us
Copyright © 1999, 2006, Oracle. All rights reserved.
Type here to search
14°C Haze
ENG
18:51
27-01-2022


SQL Commands
Amizone
Not secure
202.12.103.189:8080/apex/f?p=4500:1003:166163181011494
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
SELECT *FROM MODEL;
Results Explain Describe Saved SQL History
MAN_ID FIRST_NAME LAST_NAME SALARY
2 MORRIS MANO 60000
3 NISHI KAUR 70000
4 ANJALI SHAKTI 80000
5 YASHIKA SINGH 80000
6 JOHN NEWTON 10000
1 AVANTIKA GUPTA 50000
6 rows returned in 0.02 seconds
CSV Export
Application Express 2.1.0.00.39
Language: en-us
Copyright © 1999, 2009, Oracle. All rights reserved.
Type here to search
14°C Haze
ENG
18:58
27-01-2022


SQL Commands
Amizone
Not secure
202.12.103.189:8080/apex/f?p=4500:1003:166163181011494
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
CREATE TABLE PRODUCER
(
EMP_ID INT PRIMARY KEY,
FIRST_NAME VARCHAR(10),
LAST_NAME VARCHAR(20),
EMP_SALARY INT,
EMP_DEPT VARCHAR(30),
MAN_ID INT
);
Results Explain Describe Saved SQL History
Table created.
0.09 seconds
Application Express 2.1.0.00.39
Language: en-us
Copyright © 1999, 2009, Oracle. All rights reserved.
Type here to search
14°C Haze
ENG
19:04
27-01-2022


SQL Commands
Amazone
Not secure
202.12.103.189:8080/apex/f?p=4500:1003:166163181011494
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
INSERT INTO PRODUCER(EMP_ID,FIRST_NAME,LAST_NAME,EMP_SALARY,EMP_DEPT,MAN_ID)
VALUES(01,'ISHA','DOGRA',50000,'IT',06);
Results Explain Describe Saved SQL History
1 row(s) inserted.
0.00 seconds
Application Express 2.1.0.00.39
Language: en-us
Copyright © 1999, 2009, Oracle. All rights reserved.
Type here to search
13°C Haze
ENG
19:10
27-01-2022


SQL Commands
Amazone
Not secure
202.12.103.189:8080/apex/f?p=4500:1003:166163181011494
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
SELECT *FROM PRODUCER;
Results Explain Describe Saved SQL History
EMP_ID FIRST_NAME LAST_NAME EMP_SALARY EMP_DEPT MAN_ID
1 ISHA DOGRA 50000 IT 6
2 BHARTI GOEL 60000 CSE 7
3 YASH SINGH 70000 ESE 8
4 KARTIK CHOPRA 90000 MECHANICAL 9
5 RAGHAV SHANKAR 80000 CIVIL 9
8 LAKSHAY JOHN 90000 CIVIL 10
6 rows returned in 0.00 seconds
CSV Export
Application Express 2.1.0.00.39
Language: en-us
Copyright © 1999, 2009, Oracle. All rights reserved.
Type here to search
13°C Haze
ENG
19:20
27-01-2022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Not secure
202.12.103.189:8080/apex/f?p=4500:1003:166163181011494
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
SELECT EMP_ID, FIRST_NAME,LAST_NAME,EMP_SALARY, EMP_DEPT FROM PRODUCER WHERE MAN_ID = 8;
Results Explain Describe Saved SQL History
EMP_ID FIRST_NAME LAST_NAME EMP_SALARY EMP_DEPT
3 YASH SINGH 70000 ESE
1 rows returned in 0.00 seconds CSV Export
Language: en-us
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Copyright © 1999, 2009, Oracle. All rights reserved.
Type here to search
13°C Haze
ENG
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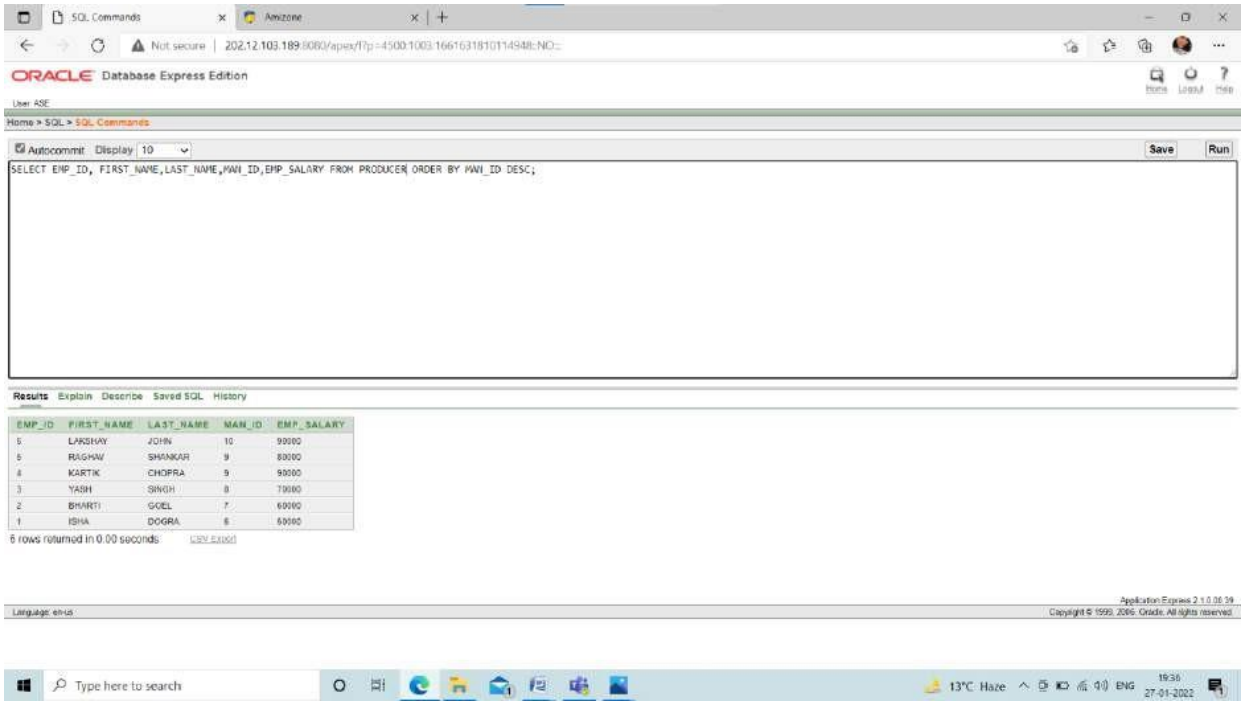
27-01-2022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ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
SELECT EMP_ID, FIRST_NAME,LAST_NAME,MAN_ID,EMP_SALARY FROM PRODUCER ORDER BY MAN_ID DESC;
Results Explain Describe Saved SQL History
EMP_ID FIRST_NAME LAST_NAME MAN_ID EMP_SALARY
5 LAKSHAY JOHN 10 90000
6 RAGHAV SHANKAR 9 80000
4 KARTIK CHOPRA 9 90000
3 YASH SINGH 8 70000
2 BHARTI GOEL 7 60000
1 ISHA DOGRA 6 60000
6 rows returned in 0.00 seconds CSV Export
Language: en-us
Application Express 2.1.0.00.39
Copyright © 1999, 2009, Oracle. All rights reserved.
Type here to search
13°C Haze
ENG
19:36
27-01-2022

EXPERIMENT-04

AIM - Write a query in SQL to Display all employee last names in which the third letter of the name is *a.*

PLATFORM USED –

Oracle.

COMMANDS USED –

1.CREATE TABLE COMMAND-

```
CREATE TABLE PRINT
(
EMP_ID INT PRIMARY KEY,
FIRST_NAME VARCHAR(10),
LAST_NAME VARCHAR(20)
);
```

2.INSERT COMMAND-

```
INSERT INTO PRINT(EMP_ID, FIRST_NAME, LAST_NAME)
VALUES(01, 'SHIKSHA','GOEL');
```

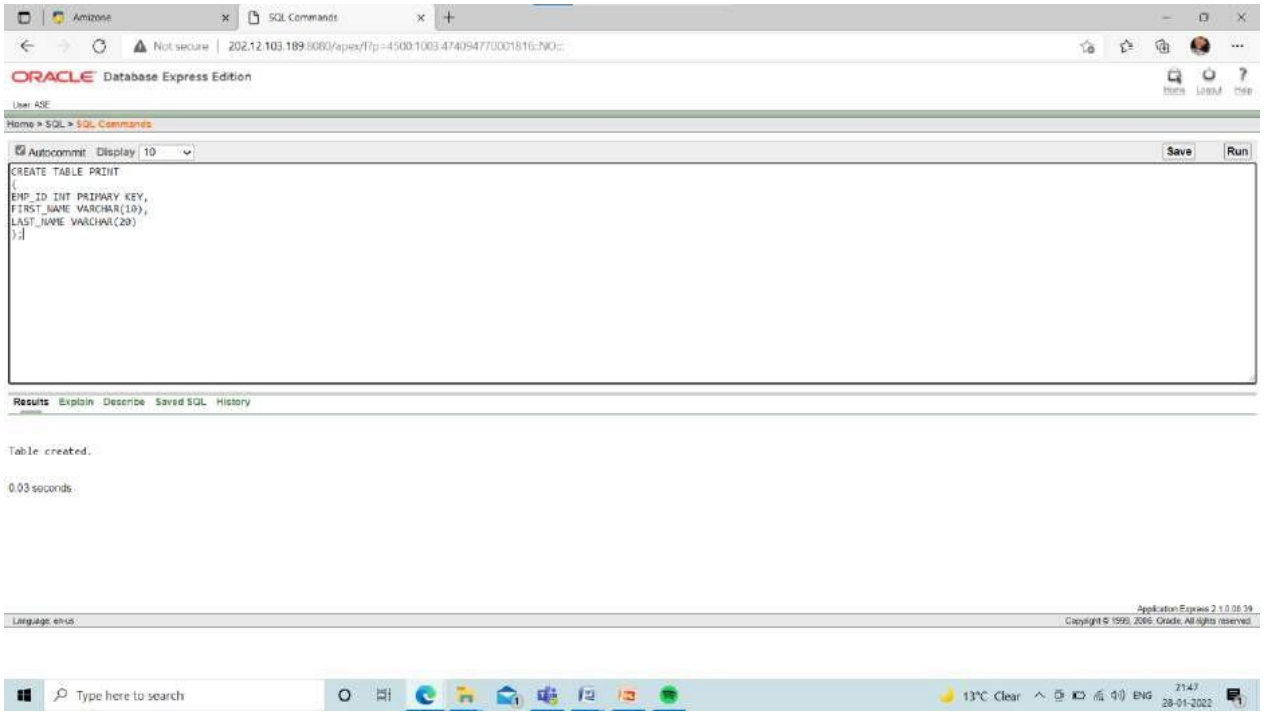
3.SELECT COMMAND-

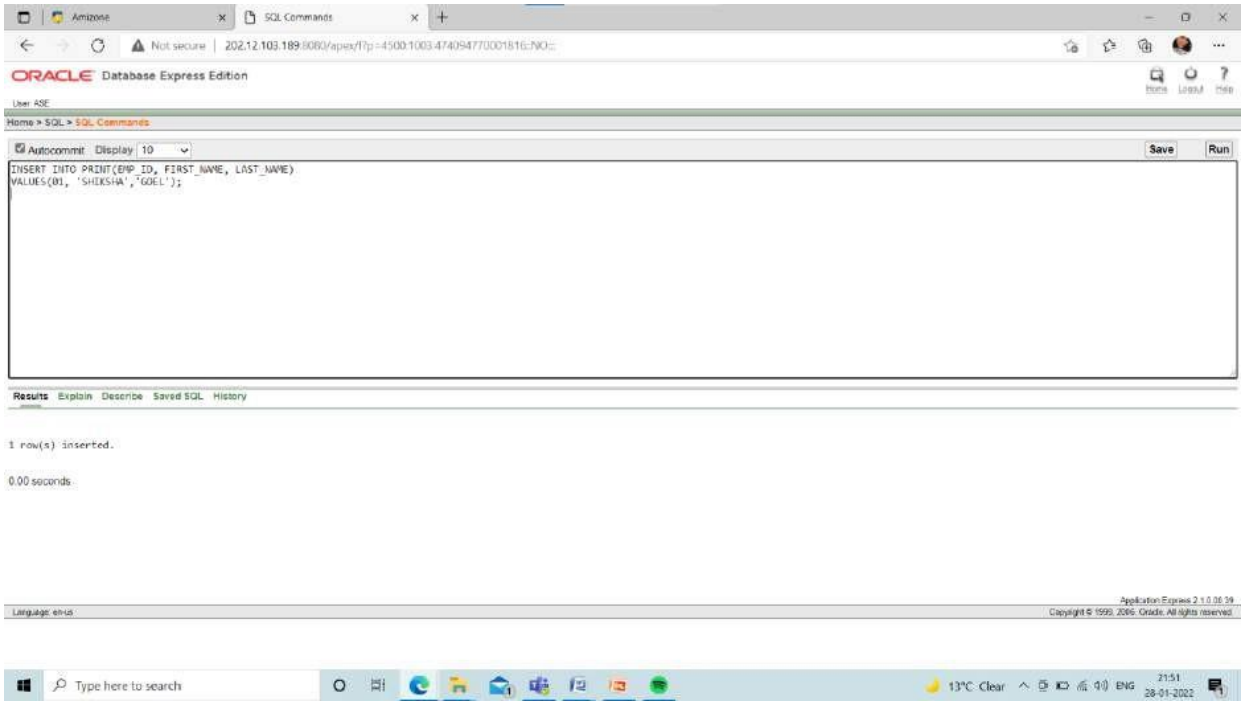
```
SELECT *FROM  PRINT;
```

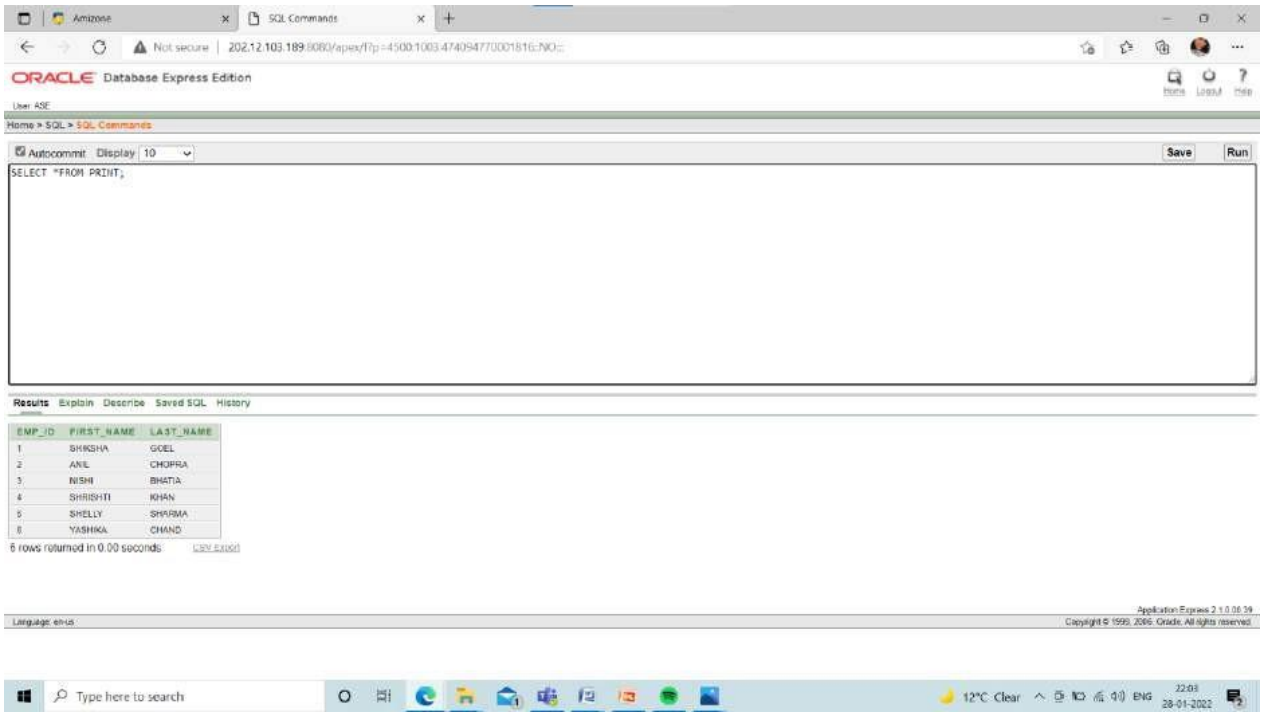
4.REQUIRED SQL-

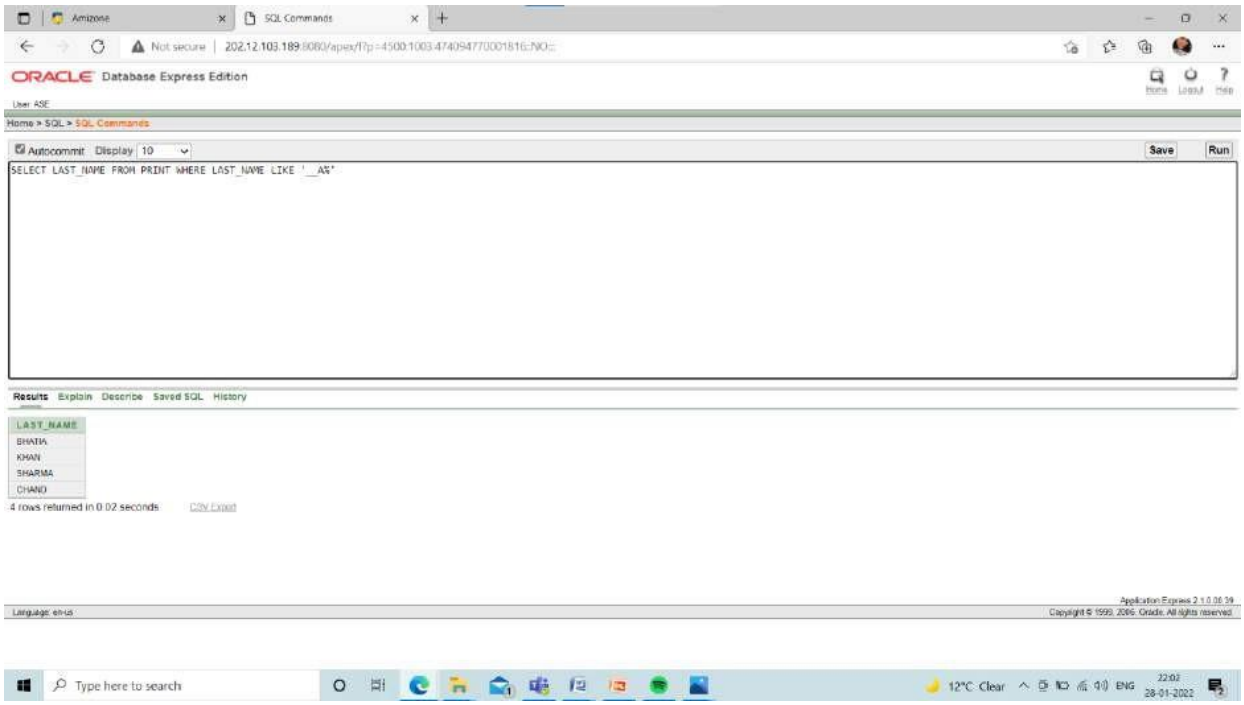
```
SELECT LAST_NAME FROM PRINT WHERE LAST_NAME LIKE '_A%'
```

OUTPUTS:


Amizone
SQL Commands
Not secure
202.12.103.189:8080/apex/f?p=4500:1003:4740947700018 16::NO::
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
CREATE TABLE PRINT
(
EMP_ID INT PRIMARY KEY,
FIRST_NAME VARCHAR(10),
LAST_NAME VARCHAR(20)
);
Results Explain Describe Saved SQL History
Table created.
0.03 seconds
Application Express 2.1.0.00.39
Language: en-us
Copyright © 1999, 2006, Oracle. All rights reserved.
Type here to search
13°C Clear
ENG
21:47
28-01-2022


Amizone
SQL Commands
Not secure
202.12.103.189:8080/apex/f?p=4500:1003:4740947700018 16::NO::
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
INSERT INTO PRINT(EMP_ID, FIRST_NAME, LAST_NAME)
VALUES(01, 'SHIKSHA','GOEL');
Results Explain Describe Saved SQL History
1 row(s) inserted.
0.00 seconds
Application Express 2.1.0.00.39
Language: en-us
Copyright © 1999, 2006, Oracle. All rights reserved.
Type here to search
13°C Clear
ENG
21:51
28-01-2022


Amizone
SQL Commands
Not secure | 202.12.103.189:8080/apex/f?p=4500:1003:4740947700018 16::NO::
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
SELECT *FROM PRINT;
Results Explain Describe Saved SQL History
EMP_ID FIRST_NAME LAST_NAME
1 SHIKSHA GOEL
2 ANIL CHOPRA
3 NISHI BHATIA
4 SHRISHTI KHAN
5 SHELLY SHARMA
6 YASHIKA CHAND
6 rows returned in 0.00 seconds
CSV Export
Application Express 2.1.0.00.39
Language: en-us
Copyright © 1999, 2009, Oracle. All rights reserved.
Type here to search
12°C Clear
ENG
22:03
28-01-2022


Amizone
SQL Commands
Not secure | 202.12.103.189:8080/apex/f?p=4500:1003:4740947700018 16::NO::
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
SELECT LAST_NAME FROM PRINT WHERE LAST_NAME LIKE '__A%'
Results Explain Describe Saved SQL History
LAST_NAME
BHATIA
KHAN
SHARMA
CHAND
4 rows returned in 0.02 seconds
CSV Export
Application Express 2.1.0.00.39
Language: en-us
Copyright © 1999, 2009, Oracle. All rights reserved.
Type here to search
12°C Clear
ENG
22:02
28-01-2022

EXPERIMENT-05

AIM - Write a query in SQL to Display the last name of all employees who have both an *a* and an *e* in their last name.

PLATFORM USED –

Oracle.

COMMANDS USED –

1.CREATE TABLE COMMAND

```
CREATE TABLE ADVENTURE

(

EMP_ID INT PRIMARY KEY,

FIRST_NAME VARCHAR(10),

LAST_NAME VARCHAR(20)

);
```

2.INSERT COMMAND-

```
INSERT INTO ADVENTURE(EMP_ID, FIRST_NAME, LAST_NAME)

VALUES(01, 'MORRIS','MANO');
```

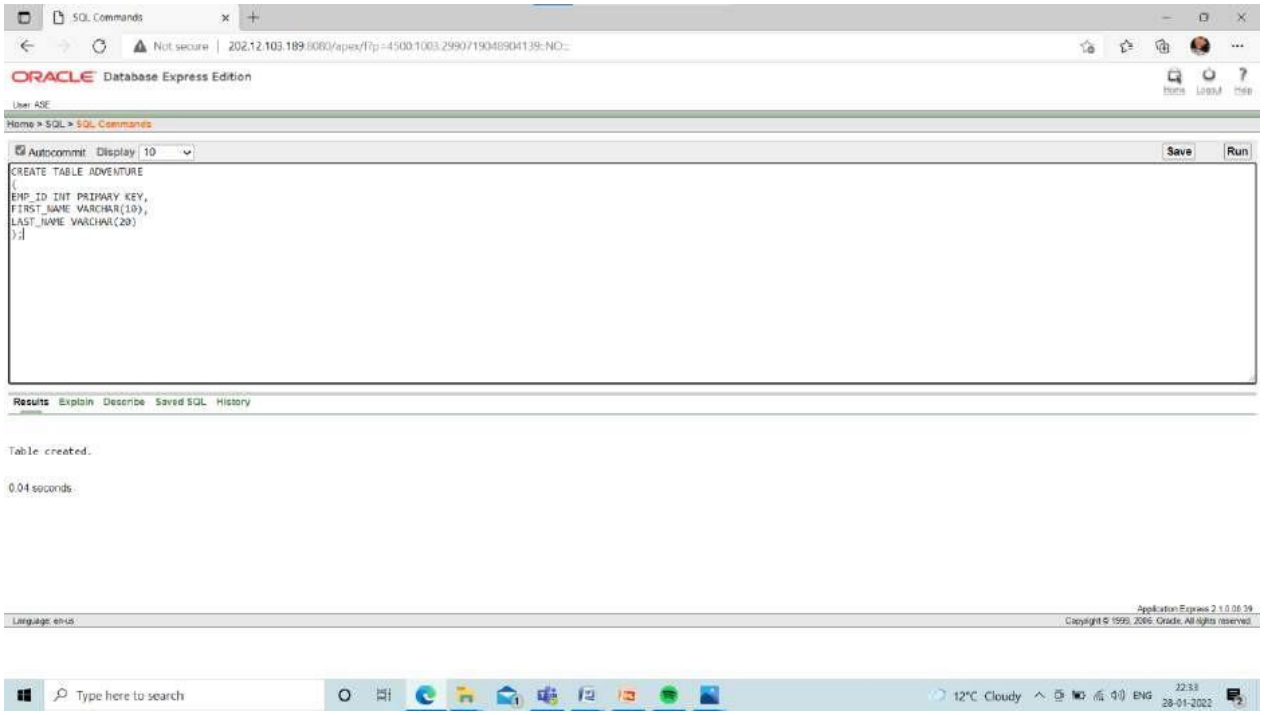
3.SELECT COMMAND-

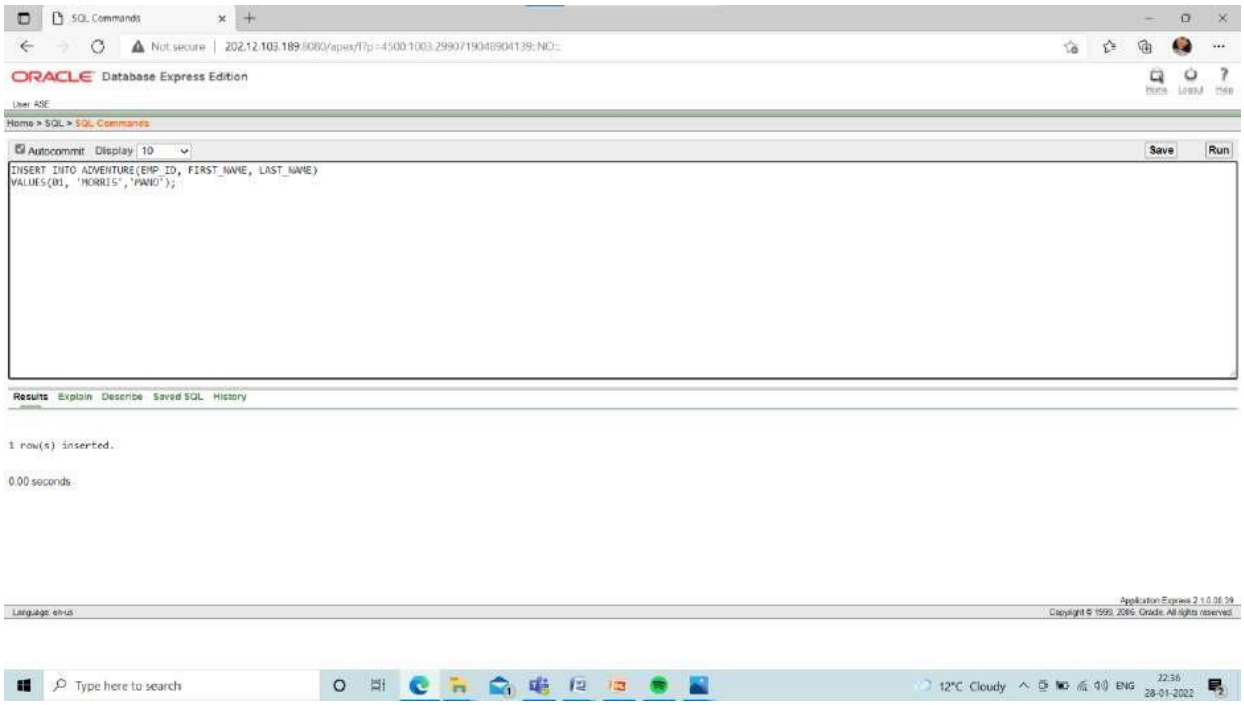
```
SELECT *FROM ADVENTURE ;
```

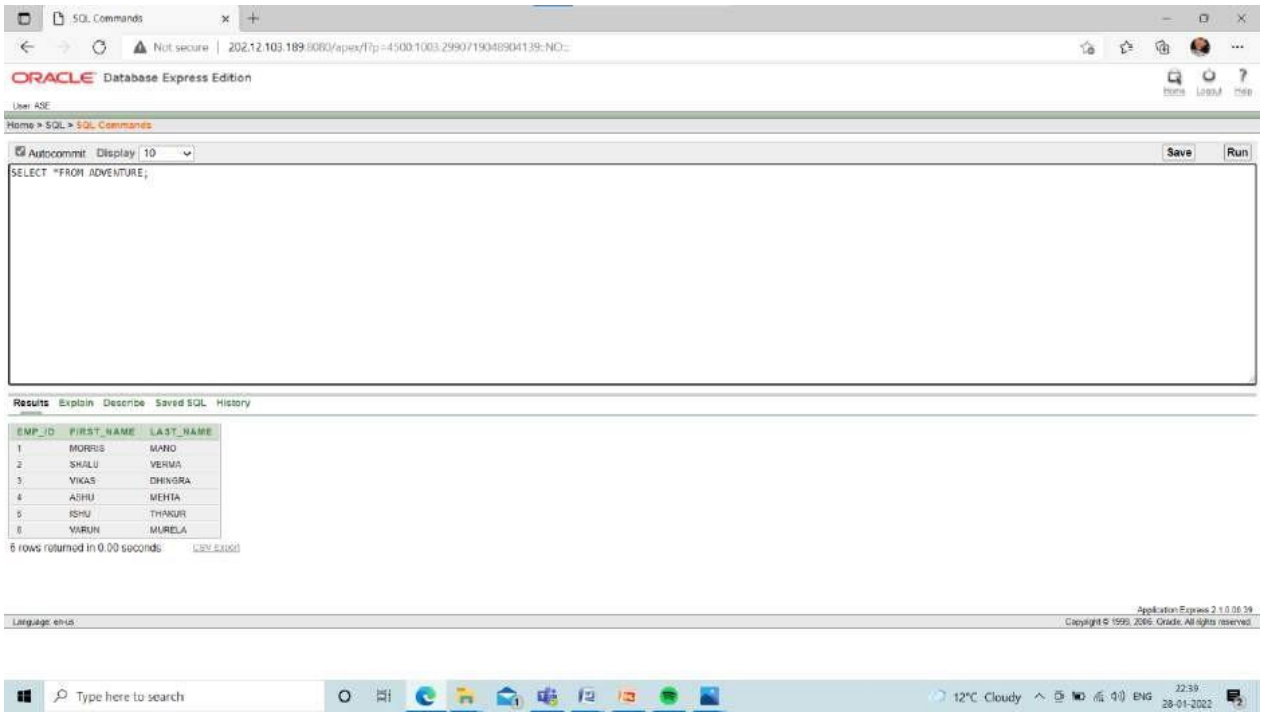
4.REQUIRED SQL-

```
SELECT LAST_NAME FROM ADVENTURE WHERE LAST_NAME LIKE '%A%' AND LAST_NAME LIKE
'%E%';
```

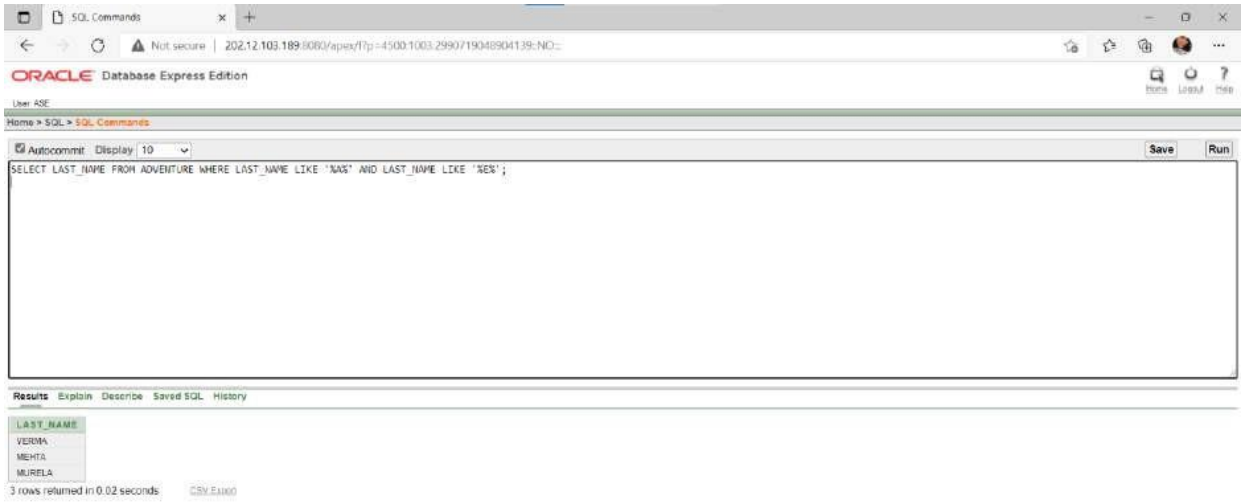
OUTPUTS:


SQL Commands
Not secure
202.12.103.189:8080/apex/f?p=4500:1003:29907190489041 39::NO::
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
CREATE TABLE ADVENTURE
(
EMP_ID INT PRIMARY KEY,
FIRST_NAME VARCHAR(10),
LAST_NAME VARCHAR(20)
);
Results Explain Describe Saved SQL History
Table created.
0.04 seconds
Application Express 2.1.0.00.39
Language: en-us
Copyright © 1999, 2006, Oracle. All rights reserved.
Type here to search
12°C Cloudy
ENG
22:33
28-01-2022


SQL Commands
Not secure
202.12.103.189:8080/apex/f?p=4500:1003:29907190489041 39::NO::
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
INSERT INTO ADVENTURE(EMP_ID, FIRST_NAME, LAST_NAME)
VALUES(01, 'MORRIS','PANO');
Results Explain Describe Saved SQL History
1 row(s) inserted.
0.00 seconds
Application Express 2.1.0.00.39
Language: en-us
Copyright © 1999, 2006, Oracle. All rights reserved.
Type here to search
12°C Cloudy
ENG
22:36
28-01-2022


SQL Commands
Not secure
202.12.103.189:8080/apex/f?p=4500:1003:29907190489041 39::NO::
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
SELECT *FROM ADVENTURE;
Results Explain Describe Saved SQL History
EMP_ID FIRST_NAME LAST_NAME
1 MORRIS MANO
2 SHALU VERMA
3 VIKAS DHINGRA
4 ASHU MEHTA
5 ISHU THAKUR
6 VARUN MURELA
6 rows returned in 0.00 seconds
CSV Export
Application Express 2.1.0.00.39
Language: en-us
Copyright © 1999, 2009, Oracle. All rights reserved.

Type here to search
12°C Cloudy
ENG
22:39
28-01-2022


SQL Commands
Not secure
202.12.103.189:8080/apex/f?p=4500:1003:29907190489041 39::NO::
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
SELECT LAST_NAME FROM ADVENTURE WHERE LAST_NAME LIKE '%A%' AND LAST_NAME LIKE '%E%';
Results Explain Describe Saved SQL History
LAST_NAME
VERMA
MEHTA
MURELA
3 rows returned in 0.02 seconds
CSV Export
Application Express 2.1.0.00.39
Language: en-us
Copyright © 1999, 2009, Oracle. All rights reserved.


Type here to search
12°C Cloudy
ENG
22:45
28-01-2022

EXPERIMENT-06

AIM - Write a query in SQL to Display the last name, job, and salary for all employees whose job is sales representative or stock clerk and whose salary is not equal to $2,500, $3,500, or $7,000.

PLATFORM USED –

Oracle.

COMMANDS USED –

1.CREATE TABLE COMMAND

```
CREATE TABLE REPRESENTATIVE
(
EMP_ID INT PRIMARY KEY,
FIRST_NAME VARCHAR(10),
LAST_NAME VARCHAR(20),
JOB VARCHAR(30),
SALARY INT
);
```

2.INSERT COMMAND-

```
INSERT INTO REPRESENTATIVE (EMP_ID, FIRST_NAME, LAST_NAME, JOB, SALARY)
VALUES(01, 'VARTIKA',' CHAUDHARY','SALES REPRESENTATIVE',9500);
```

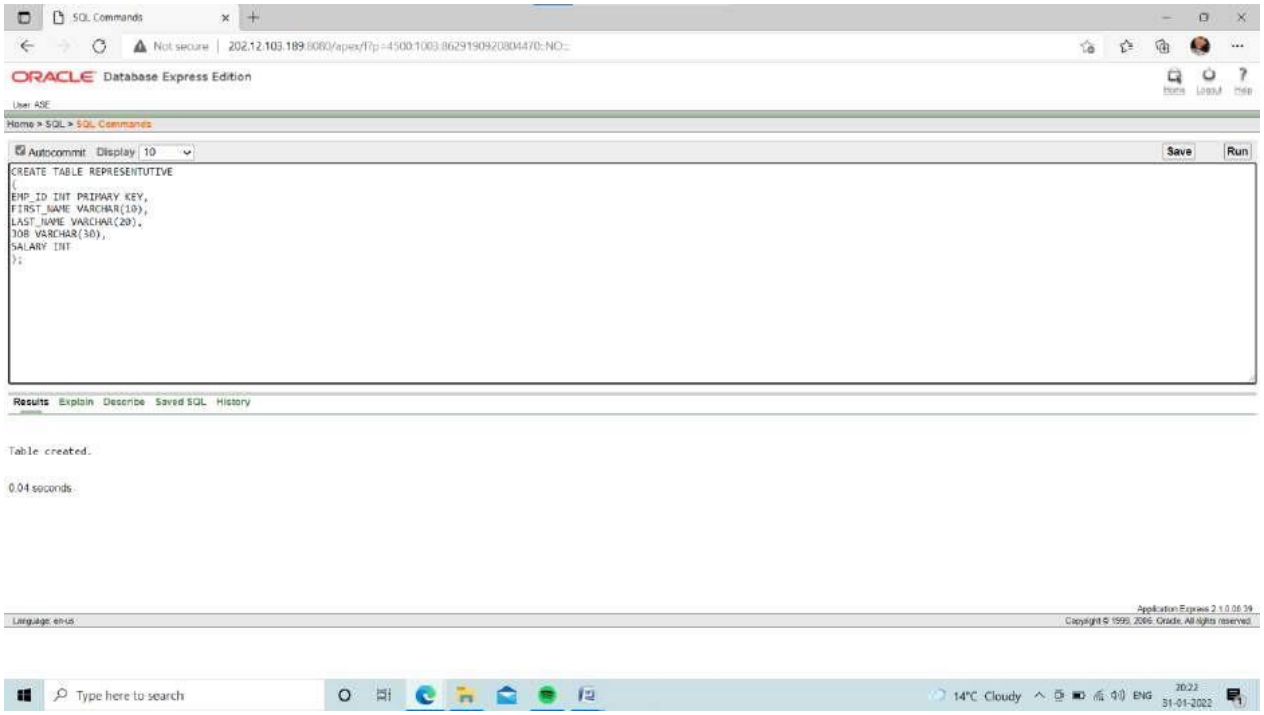
3.SELECT COMMAND-

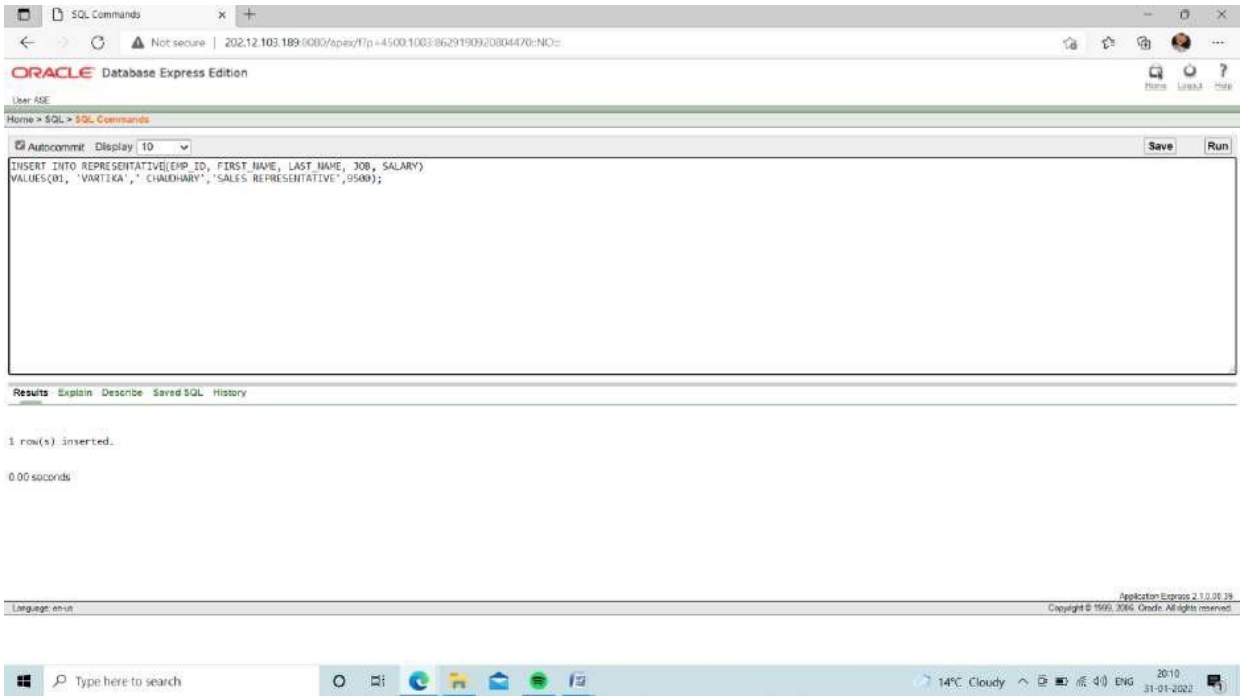
```
SELECT *FROM REPRESENTATIVE;
```

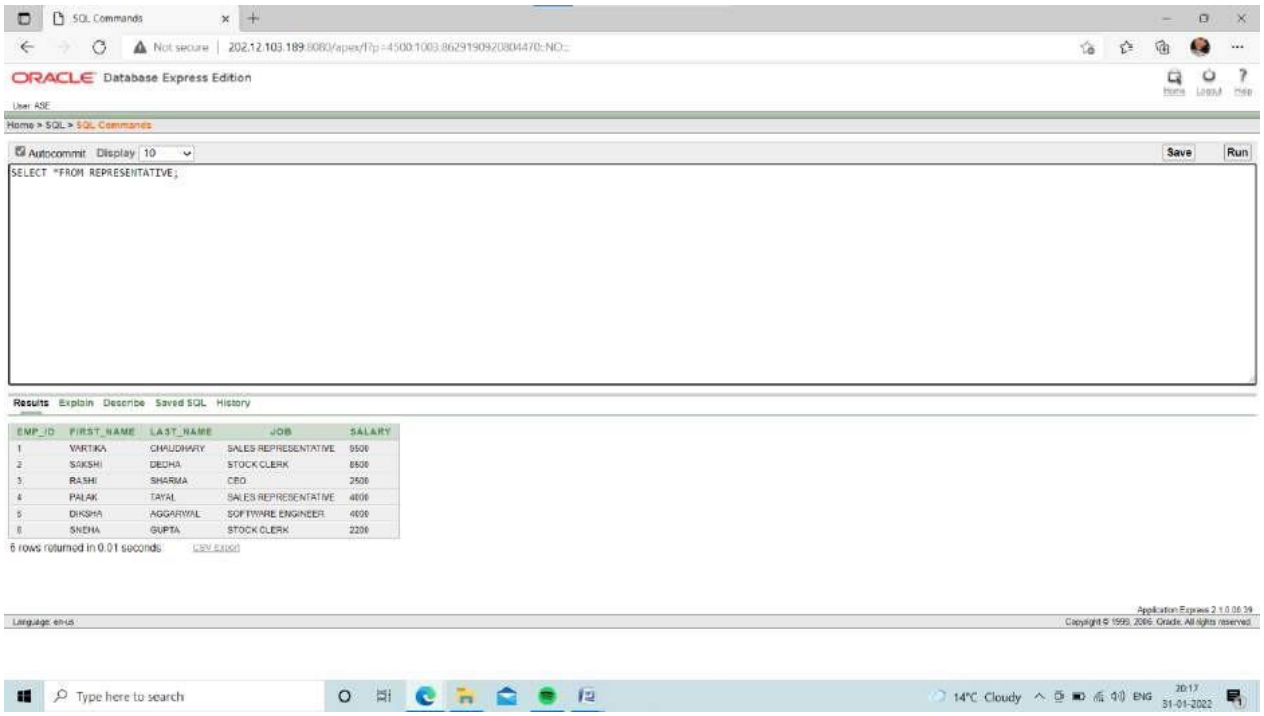
4.REQUIRED SQL-

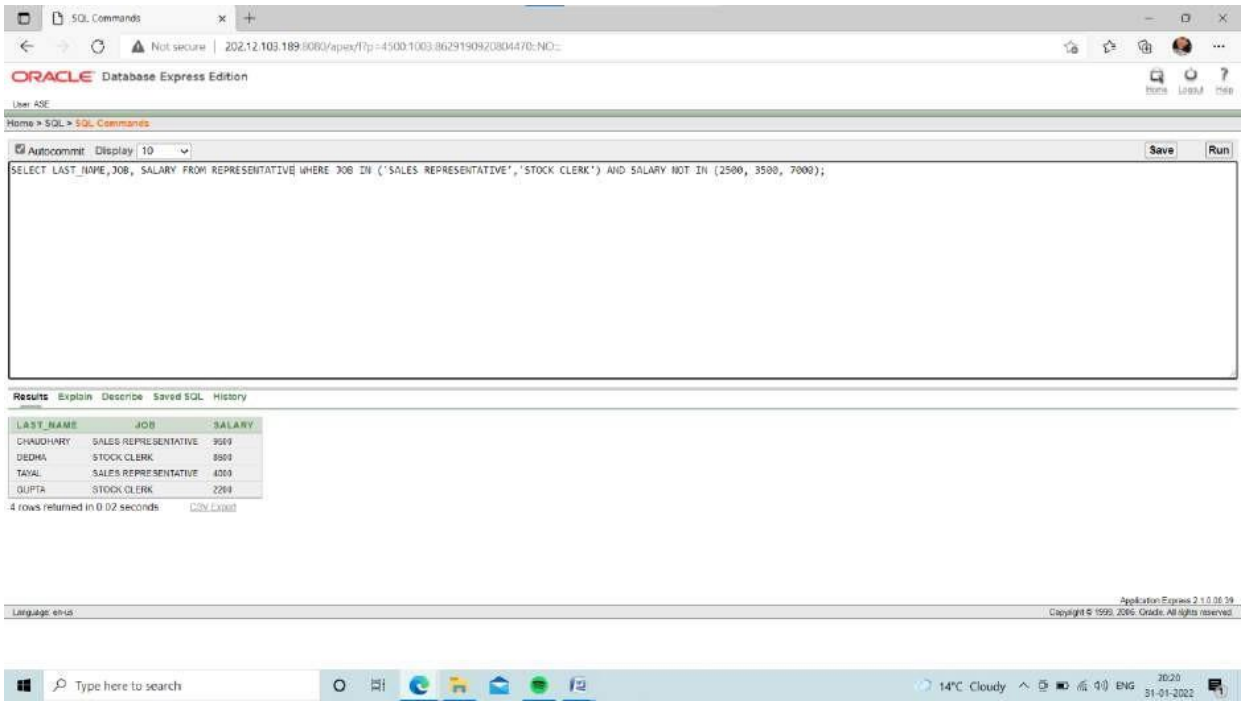
```
SELECT LAST_NAME,JOB, SALARY FROM REPRESENTATIVE WHERE JOB IN ('SALES
REPRESENTATIVE','STOCK CLERK') AND SALARY NOT IN (2500, 3500, 7000);
```

OUTPUTS:


SQL Commands
Not secure
202.12.103.189:8080/apex/f?p=4500:1003:86291909208044
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
CREATE TABLE REPRESENTUTIVE
(
EMP_ID INT PRIMARY KEY,
FIRST_NAME VARCHAR(10),
LAST_NAME VARCHAR(20),
JOB VARCHAR(30),
SALARY INT
);
Results Explain Describe Saved SQL History
Table created.
0.04 seconds
Application Express 21.1.0.00.39
Language: en-us
Copyright © 1999, 2006, Oracle. All rights reserved.
Type here to search
14°C Cloudy
ENG
20:23
31-01-2022


SQL Commands
Not secure
202.12.103.189:8080/apex/f?p=4500:1003:86291909208044
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
INSERT INTO REPRESENTATIVE(EMP_ID, FIRST_NAME, LAST_NAME, JOB, SALARY)
VALUES(01, 'VARTIKA',' CHAUDHARY','SALES REPRESENTATIVE',9500);
Results Explain Describe Saved SQL History
1 row(s) inserted.
0.00 seconds
Application Express 21.1.0.00.39
Language: en-us
Copyright © 1999, 2006, Oracle. All rights reserved.
Type here to search
14°C Cloudy
ENG
20:10
31-01-2022


SQL Commands
Not secure
202.12.103.189:8080/apex/f?p=4500:1003:86291909208047O:NO::
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
SELECT *FROM REPRESENTATIVE;
Results Explain Describe Saved SQL History
EMP_ID FIRST_NAME LAST_NAME JOB SALARY
1 VARTIKA CHAUDHARY SALES REPRESENTATIVE 9500
2 SAKSHI DEDHA STOCK CLERK 8500
3 RASHI SHARMA CEO 2500
4 PALAK TAYAL SALES REPRESENTATIVE 4000
5 DIKSHA AGGARWAL SOFTWARE ENGINEER 4000
6 SNEHA GUPTA STOCK CLERK 2200
6 rows returned in 0.01 seconds CSV Export
Language: en-us
Application Express 2.1.0.00.39
Copyright © 1999, 2009, Oracle. All rights reserved.
Type here to search
14°C Cloudy
ENG
20:17
31-01-2022


SQL Commands
Not secure
202.12.103.189:8080/apex/f?p=4500:1003:86291909208047O:NO::
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
SELECT LAST_NAME,JOB, SALARY FROM REPRESENTATIVE WHERE JOB IN ('SALES REPRESENTATIVE','STOCK CLERK') AND SALARY NOT IN (2500, 3500, 7000);
Results Explain Describe Saved SQL History
LAST_NAME JOB SALARY
CHAUDHARY SALES REPRESENTATIVE 9500
DEDHA STOCK CLERK 8500
TAYAL SALES REPRESENTATIVE 4000
GUPTA STOCK CLERK 2200
4 rows returned in 0.02 seconds CSV Export
Language: en-us
Application Express 2.1.0.00.39
Copyright © 1999, 2009, Oracle. All rights reserved.
Type here to search
14°C Cloudy
ENG
20:20
31-01-2022

EXPERIMENT-07

AIM - Write a query in SQL to display the employee number, last name, salary, and salary increased by 15.5% (expressed as a whole number) for each employee. Label the column New Salary.

PLATFORM USED –

Oracle.

COMMANDS USED –

1.CREATE TABLE COMMAND

```
CREATE TABLE TEMPLATE
(
EMP_ID INT PRIMARY KEY,
FIRST_NAME VARCHAR(10),
LAST_NAME VARCHAR(20),
SALARY INT
);
```

2.INSERT COMMAND-

```
INSERT INTO TEMPLATE(EMP_ID, FIRST_NAME, LAST_NAME, SALARY)
VALUES(01,'MORRIS', 'MANO', 15000);
```

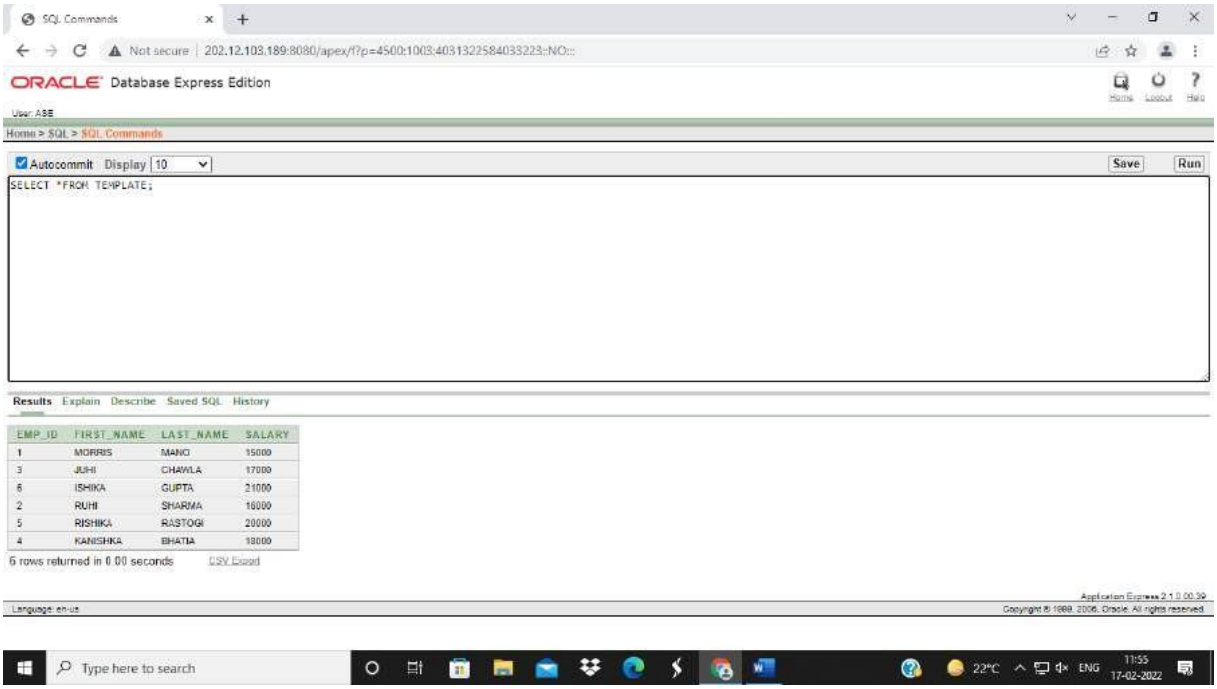
3.SELECT COMMAND-

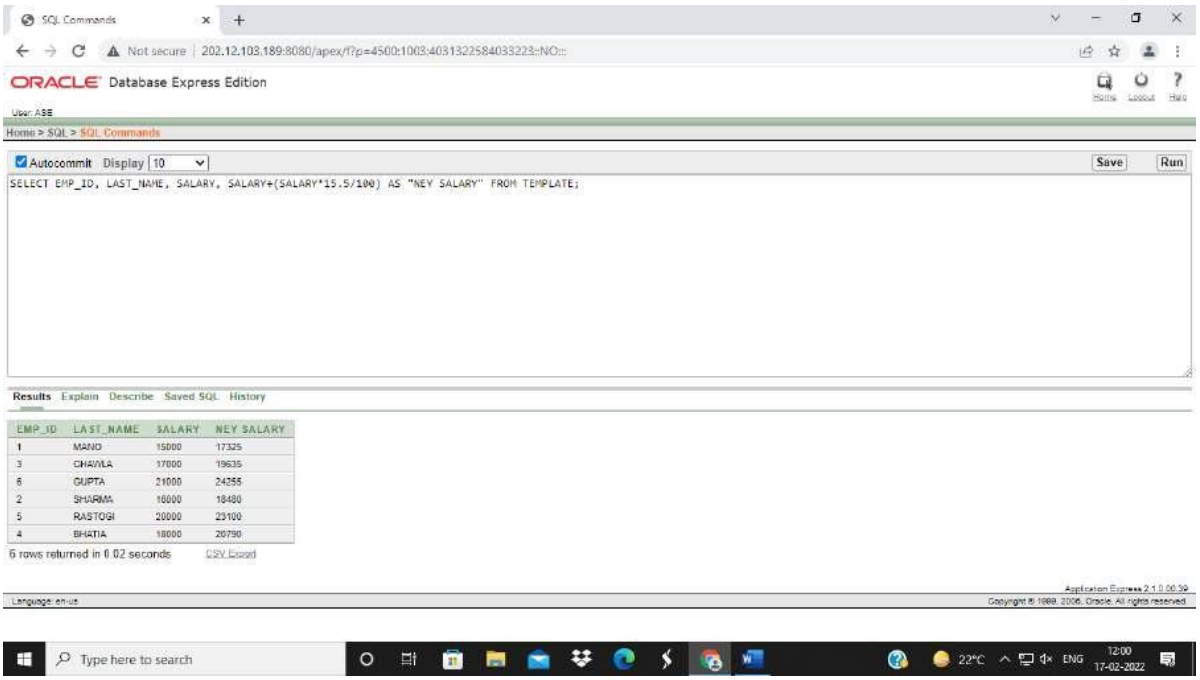
```
SELECT *FROM TEMPLATE;
```

4.REQUIRED SQL-

```
SELECT EMP_ID, LAST_NAME, SALARY, SALARY+(SALARY*15.5/100) AS "NEY SALARY"
FROM TEMPLATE;
```

OUTPUTS:


SQL Commands
Not secure | 202.12.103.189:8080/apex/f?p=4500:1003:403132258403322 3::NO:::
ORACLE Database Express Edition
User: ABE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
SELECT *FROM TEMPLATE;
Results Explain Describe Saved SQL History
EMP_ID FIRST_NAME LAST_NAME SALARY
1 MORRIS MANO 15000
3 JUHI CHAWLA 17000
6 ISHIKA GUPTA 21000
2 RUHI SHARMA 16000
5 RISHIKA RASTOGI 20000
4 KANISHKA BHATIA 18000
6 rows returned in 0.00 seconds CSV Export
Application Express 21.1.0.00.39
Language: en-us
Copyright © 1999, 2006, Oracle. All rights reserved
Type here to search
22°C
ENG
11:55
17-02-2022


SQL Commands
Not secure | 202.12.103.189:8080/apex/f?p=4500:1003:403132258403322 3::NO:::
ORACLE Database Express Edition
User: ABE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
SELECT EMP_ID, LAST_NAME, SALARY, SALARY+(SALARY*15.5/100) AS "NEY SALARY" FROM TEMPLATE;
Results Explain Describe Saved SQL History
EMP_ID LAST_NAME SALARY NEY SALARY
1 MANO 15000 17325
3 CHAWLA 17000 19635
6 GUPTA 21000 24255
2 SHARMA 16000 18480
5 RASTOGI 20000 23100
4 BHATIA 18000 20790
6 rows returned in 0.02 seconds CSV Export
Application Express 21.1.0.00.39
Language: en-us
Copyright © 1999, 2006, Oracle. All rights reserved
Type here to search
22°C
ENG
12:00
17-02-2022

EXPERIMENT-08

AIM - Create a report that produces the following for each employee: <employee last name> earns <salary> monthly but wants <3 times salary>. Label the column Dream Salaries.

PLATFORM USED –

Oracle.

COMMANDS USED –

1.CREATE TABLE COMMAND

```
CREATE TABLE TEMPLATE
(
EMP_ID INT PRIMARY KEY,
FIRST_NAME VARCHAR(10),
LAST_NAME VARCHAR(20),
SALARY INT
);
```

2.INSERT_COMMAND-

```
INSERT INTO TEMPLATE(EMP_ID, FIRST_NAME, LAST_NAME, SALARY)
VALUES(01,'MORRIS', 'MANO', 15000);
```

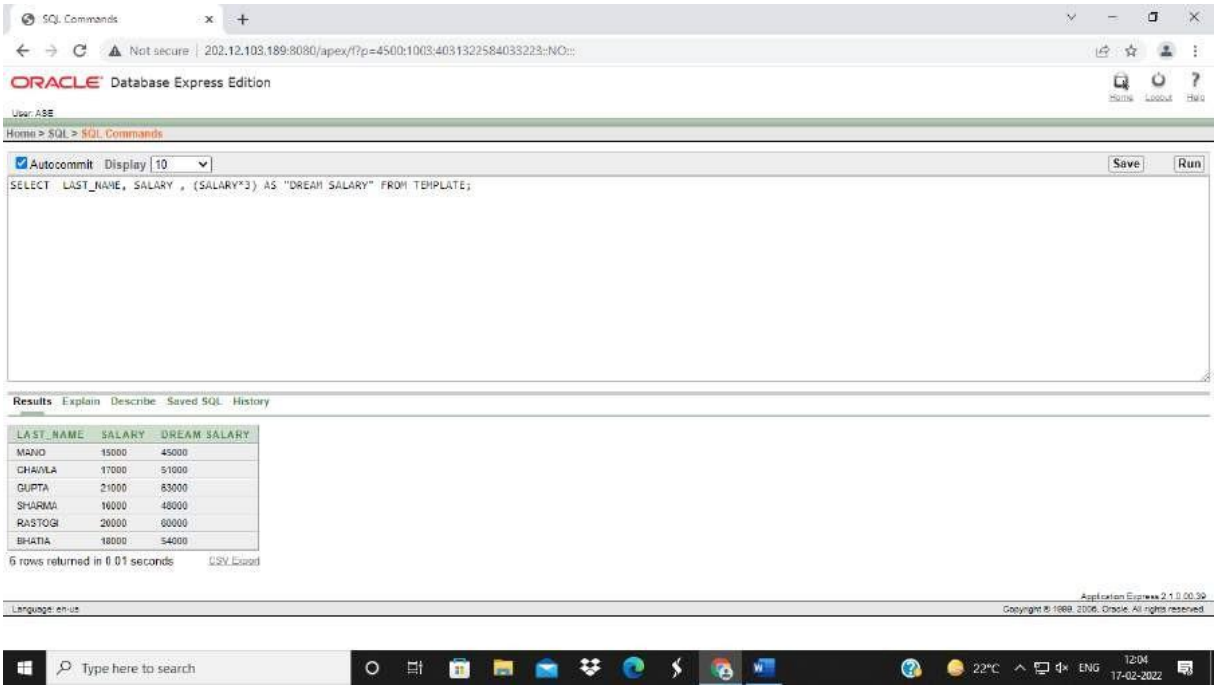
3.SELECT_COMMAND-

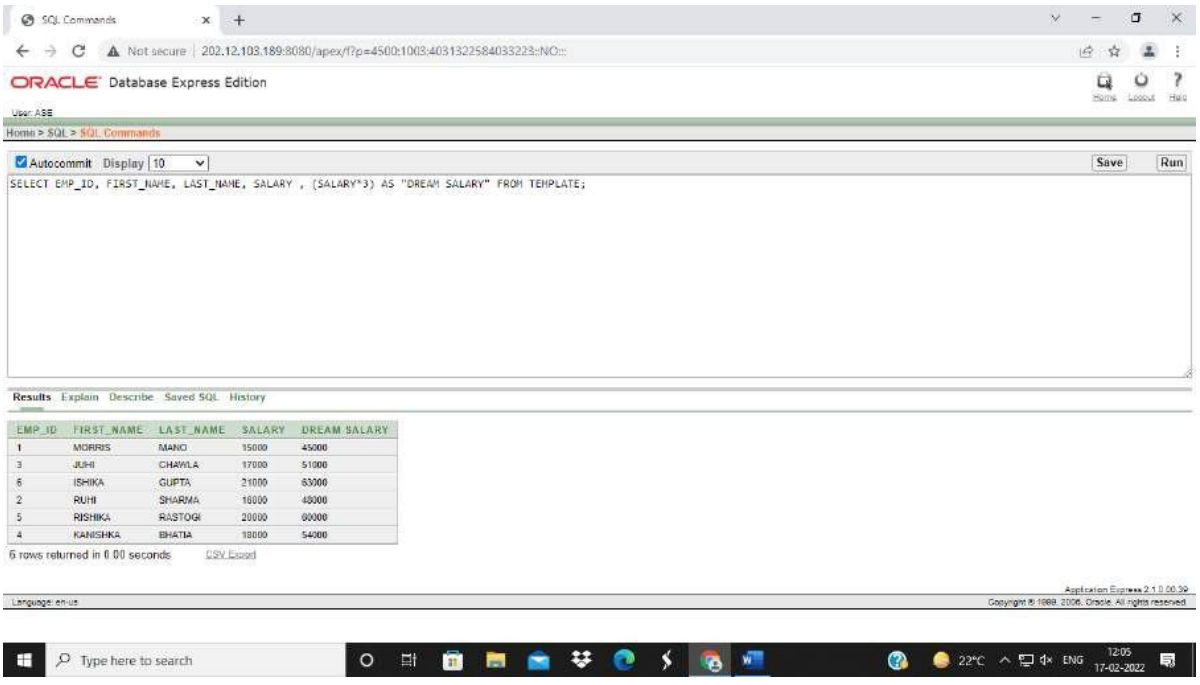
```
SELECT *FROM TEMPLATE;
```

4.REQUIRED SQL-

```
SELECT  LAST_NAME, SALARY , (SALARY*3) AS "DREAM SALARY" FROM TEMPLATE;
SELECT EMP_ID, FIRST_NAME, LAST_NAME, SALARY , (SALARY*3) AS "DREAM SALARY"
FROM TEMPLATE;
```

OUTPUTS:


SQL Commands
Not secure | 202.12.103.189:8080/apex/f?p=4500:1003:403132258403322 3::NO:::
ORACLE Database Express Edition
User: ABE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
SELECT LAST_NAME, SALARY , (SALARY*3) AS "DREAM SALARY" FROM TEMPLATE;
Results Explain Describe Saved SQL History
LAST_NAME SALARY DREAM SALARY
MANO 15000 45000
CHAWLA 17000 51000
GUPTA 21000 63000
SHARMA 16000 48000
RASTOGI 20000 60000
BHATIA 18000 54000
6 rows returned in 0.01 seconds
CSV Export
Application Express 2.1.0.00.39
Language: en-us
Copyright © 1999, 2006, Oracle. All rights reserved.
Type here to search
22°C
ENG
12:04
17-02-2022


SQL Commands
Not secure | 202.12.103.189:8080/apex/f?p=4500:1003:403132258403322 3::NO:::
ORACLE Database Express Edition
User: ABE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
SELECT EMP_ID, FIRST_NAME, LAST_NAME, SALARY , (SALARY*3) AS "DREAM SALARY" FROM TEMPLATE;
Results Explain Describe Saved SQL History
EMP_ID FIRST_NAME LAST_NAME SALARY DREAM SALARY
1 MORRIS MANO 15000 45000
3 JUHI CHAWLA 17000 51000
6 ISHIKA GUPTA 21000 63000
2 RUHI SHARMA 16000 48000
5 RISHIKA RASTOGI 20000 60000
4 KANISHKA BHATIA 18000 54000
6 rows returned in 0.00 seconds
CSV Export
Application Express 2.1.0.00.39
Language: en-us
Copyright © 1999, 2006, Oracle. All rights reserved.
Type here to search
22°C
ENG
12:05
17-02-2022

EXPERIMENT-09

AIM - Create a query to display the last name and salary for all employees. Format the salary to be 15 characters long, left-padded with the $ symbol. Label the column SALARY.

PLATFORM USED –

Oracle.

COMMANDS USED –

1.CREATE TABLE COMMAND

```
CREATE TABLE TEMPLATE
(
EMP_ID INT PRIMARY KEY,
FIRST_NAME VARCHAR(10),
LAST_NAME VARCHAR(20),
SALARY INT
);
```

2.INSERT COMMAND-

```
INSERT INTO TEMPLATE(EMP_ID, FIRST_NAME, LAST_NAME, SALARY)
VALUES(01,'MORRIS', 'MANO', 15000);
```

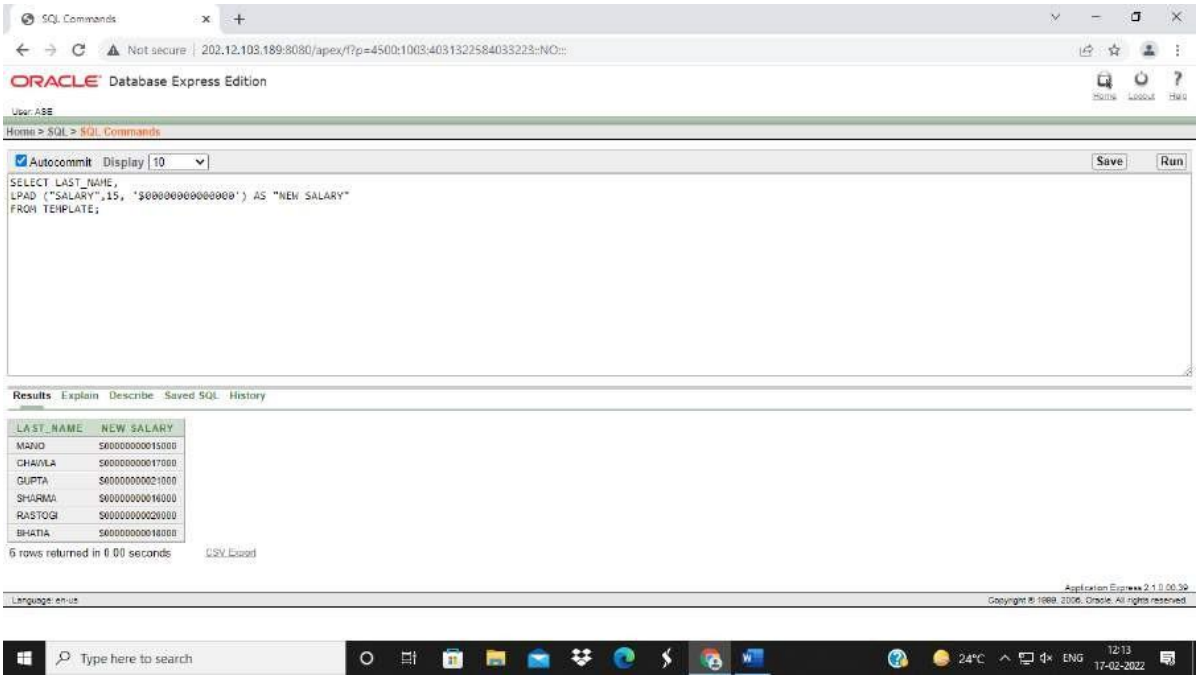
3.SELECT COMMAND-

```
SELECT *FROM TEMPLATE;
```

4.REQUIRED SQL-

```
SELECT LAST_NAME, LPAD ("SALARY",15, '$00000000000000') AS "NEW SALARY" FROM
TEMPLATE;
```

OUTPUTS:


SQL Commands
Not secure | 202.12.103.189:8080/apex/f?p=4500:1003:4031322584033223::NO::
ORACLE Database Express Edition
User: ABE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
SELECT LAST_NAME,
LPAD ("SALARY",15, '$00000000000000') AS "NEW SALARY"
FROM TEMPLATE;
Results Explain Describe Saved SQL History
LAST_NAME NEW SALARY
MANO $00000000015000
CHAWLA $00000000017000
GUPTA $00000000021000
SHARMA $00000000016000
RASTOGI $00000000029000
BHATIA $00000000018000
6 rows returned in 0.00 seconds
CSV Export
Application Express 2.1.0.00.39
Language: en-us
Copyright © 1999, 2006, Oracle. All rights reserved.
Type here to search
24°C
ENG
12:13
17-02-2022

EXPERIMENT-10

AIM – E1 and E2 are two tables,write a query to display employee first name from E1 in upper case and label it as employee name.

PLATFORM USED –

Oracle.

COMMANDS USED –

1.CREATE TABLE COMMAND

```
CREATE TABLE TEMPLATE
(
EMP_ID INT PRIMARY KEY,
FIRST_NAME VARCHAR(10),
LAST_NAME VARCHAR(20),
SALARY INT
);
```

2.INSERT_COMMAND-

```
INSERT INTO TEMPLATE(EMP_ID, FIRST_NAME, LAST_NAME, SALARY)
VALUES(01,'MORRIS', 'MANO', 15000);
```

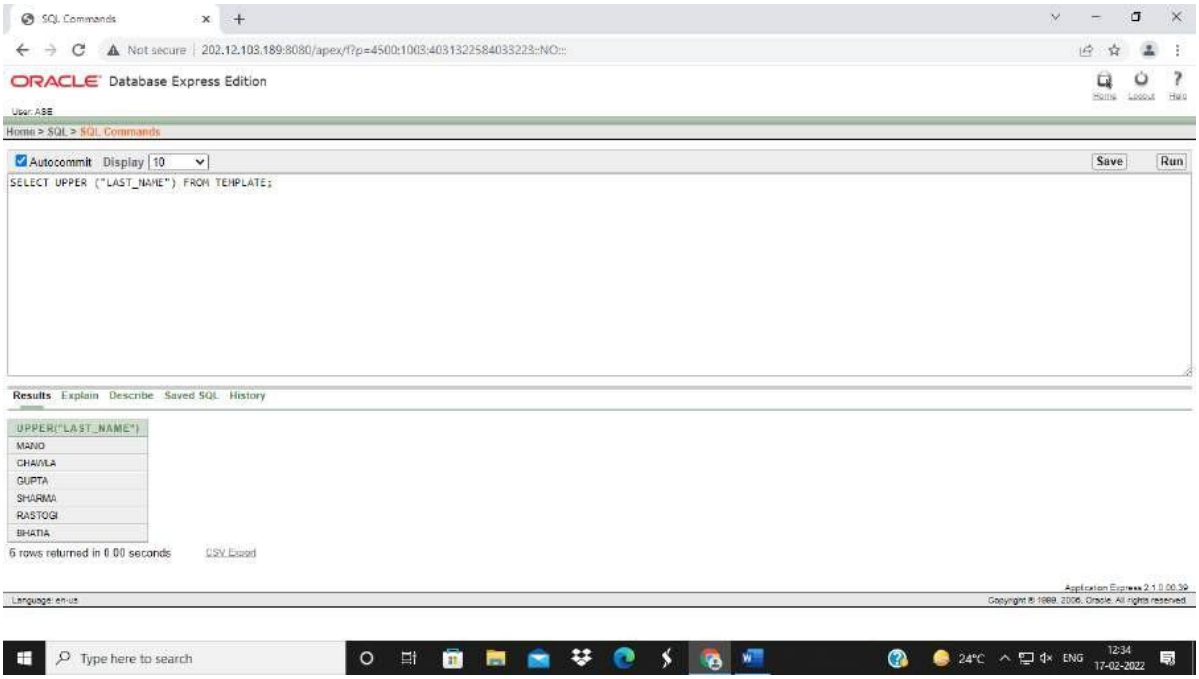
3.SELECT_COMMAND-

```
SELECT *FROM TEMPLATE;
```

4.REQUIRED SQL-

```
SELECT UPPER ("FIRST_NAME") FROM TEMPLATE;
```

OUTPUTS:


SQL Commands
Not secure | 202.12.103.189:8080/apex/f?p=4500:1003:4031322584033223::NO::
ORACLE Database Express Edition
User: ABE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
SELECT UPPER ("LAST_NAME") FROM TEMPLATE;
Results Explain Describe Saved SQL History
UPPER("LAST_NAME")
MANO
CHAWLA
GUPTA
SHARMA
RASTOGI
BHATIA
6 rows returned in 0.00 seconds
CSV Export
Language: en-us
Copyright © 1999, 2006, Oracle. All rights reserved.
Type here to search
24°C
ENG
12:34
17-02-2022

EXPERIMENT-11

AIM – Write a query retrieve the first character of employee last name from the table.

PLATFORM USED –

Oracle.

COMMANDS USED –

1.CREATE TABLE COMMAND

```
CREATE TABLE TEMPLATE
(
EMP_ID INT PRIMARY KEY,
FIRST_NAME VARCHAR(10),
LAST_NAME VARCHAR(20),
SALARY INT
);
```

2.INSERT COMMAND-

```
INSERT INTO TEMPLATE(EMP_ID, FIRST_NAME, LAST_NAME, SALARY)
VALUES(01,'MORRIS', 'MANO', 15000);
```

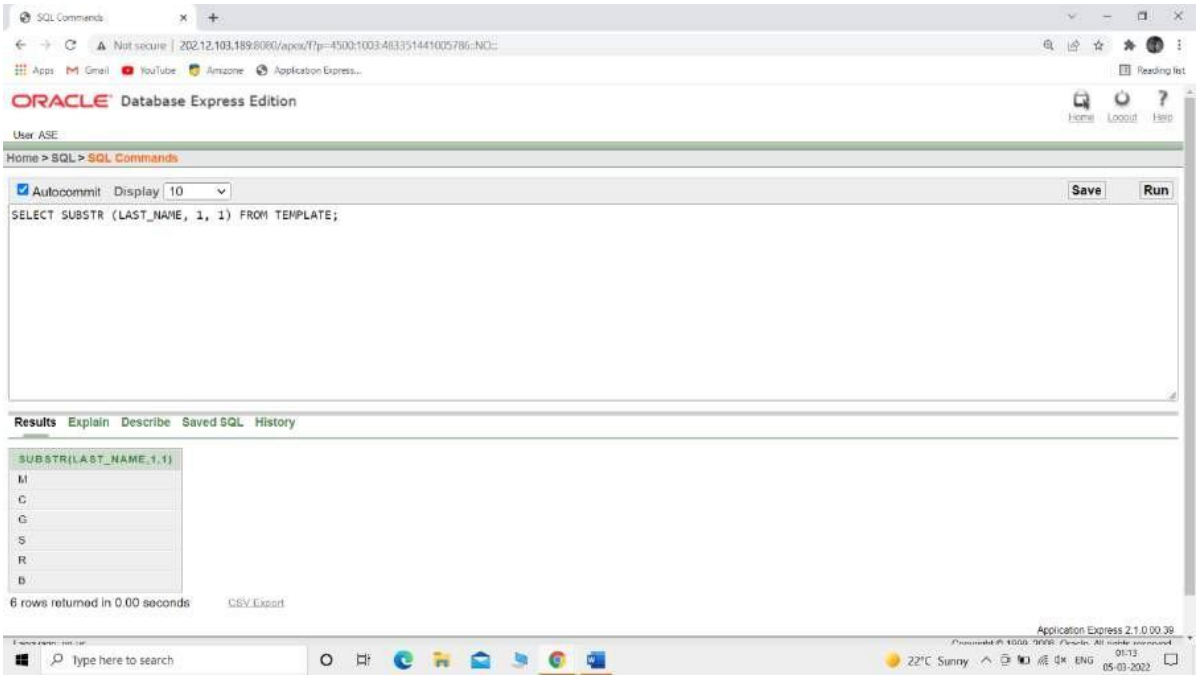
3.SELECT COMMAND-

```
SELECT *FROM TEMPLATE;
```

4.REQUIRED SQL-

```
SELECT SUBSTR (LAST_NAME, 1, 1) FROM TEMPLATE;
```

OUTPUT:


SQL Commands
Not secure | 202.12.103.189:8080/apex/f?p=4500:1003:48335144100578
Apps
Gmail
YouTube
Amazone
Application Express...
Reading list
ORACLE Database Express Edition
Home
Logout
Help
User ASE
Home > SQL > SQL Commands
Autocommit
Display 10
Save
Run
SELECT SUBSTR (LAST_NAME, 1, 1) FROM TEMPLATE;
Results
Explain
Describe
Saved SQL
History
SUBSTR(LAST_NAME,1,1)
M
C
G
S
R
B
6 rows returned in 0.00 seconds
CSV Export
Application Express 2.1.0.00.39
Type here to search
22°C Sunny
ENG
01:13
05-03-2022

EXPERIMENT-12

AIM – write a query to retrieve employee first name and last name in single column as full name where full name should be separated with space.

PLATFORM USED –

Oracle.

COMMANDS USED –

1.CREATE TABLE COMMAND

```
CREATE TABLE TEMPLATE
(
EMP_ID INT PRIMARY KEY,
FIRST_NAME VARCHAR(10),
LAST_NAME VARCHAR(20),
SALARY INT
);
```

2.INSERT_COMMAND-

```
INSERT INTO TEMPLATE(EMP_ID, FIRST_NAME, LAST_NAME, SALARY)
VALUES(01,'MORRIS', 'MANO', 15000);
```

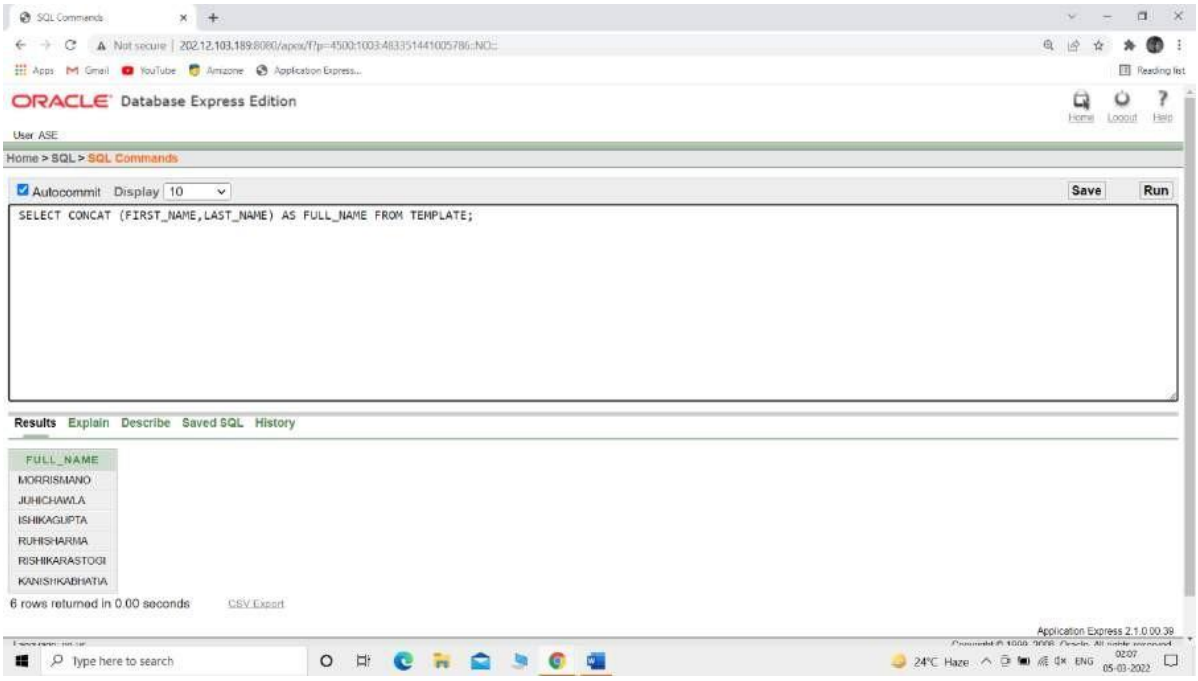
3.SELECT_COMMAND-

```
SELECT *FROM TEMPLATE;
```

4.REQUIRED SQL-

```
SELECT CONCAT (FIRST_NAME,LAST_NAME) AS FULL_NAME FROM TEMPLATE;
```

OUTPUT:


SQL Commands
Not secure | 202.12.103.189:8080/apex/f?p=4500:1003:48335144100578
Apps
Gmail
YouTube
Amazone
Application Express...
Reading list
ORACLE Database Express Edition
Home
Logout
Help
User ASE
Home > SQL > SQL Commands
Autocommit
Display 10
Save
Run
SELECT CONCAT (FIRST_NAME,LAST_NAME) AS FULL_NAME FROM TEMPLATE;
Results
Explain
Describe
Saved SQL
History
FULL_NAME
MORRISMANO
JUHICHAWLA
ISHIKAGUPTA
RUHISHARMA
RISHIKARASTOGI
KANISHKABHATIA
6 rows returned in 0.00 seconds
CSV Export
Application Express 2.1.0.00.39
Type here to search
24°C Haze
ENG
02:07
05-03-2022

EXPERIMENT-13

AIM – Write a query to display the records that are present in one table but not in another table.

PLATFORM USED –

Oracle.

COMMANDS USED –

1.CREATE TABLE COMMAND

```
CREATE TABLE TEMPLATE
(
EMP_ID INT PRIMARY KEY,
FIRST_NAME VARCHAR(10),
LAST_NAME VARCHAR(20),
SALARY INT
);
```

2.INSERT COMMAND-

```
INSERT INTO TEMPLATE(EMP_ID, FIRST_NAME, LAST_NAME, SALARY)
VALUES(01,'MORRIS', 'MANO', 15000);
```

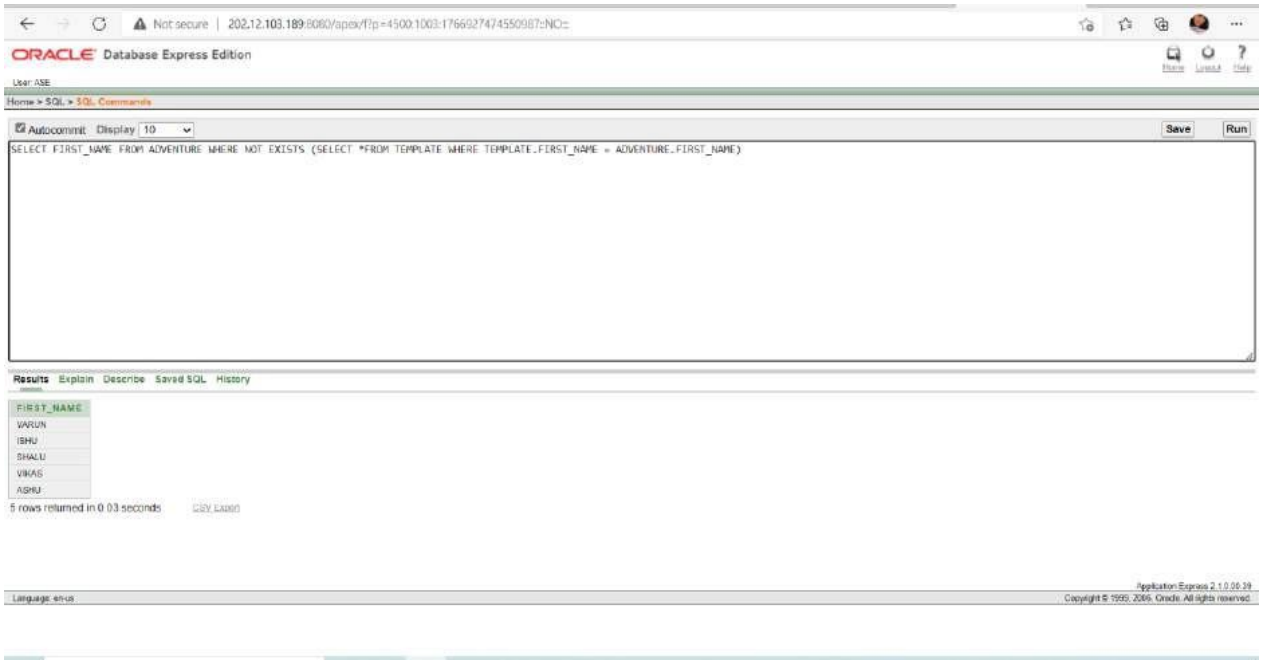
3.SELECT COMMAND-

```
SELECT *FROM TEMPLATE;
```

4.REQUIRED SQL-

```
SELECT FIRST_NAME FROM ADVENTURE WHERE NOT EXISTS (SELECT *FROM
TEMPLATE WHERE TEMPLATE.FIRST_NAME = ADVENTURE.FIRST_NAME)
```

OUTPUT:


Not secure | 202.12.103.189:8080/apex/f?p=4500:1003:17669274745509872::NO::
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit Display 10
Save
Run
SELECT FIRST_NAME FROM ADVENTURE WHERE NOT EXISTS (SELECT *FROM TEMPLATE WHERE TEMPLATE.FIRST_NAME = ADVENTURE.FIRST_NAME)
Results Explain Describe Saved SQL History
FIRST_NAME
VARUN
ISHU
SHALU
VIKAS
ASHU
5 rows returned in 0.03 seconds
CSV Export
Language: en-us
Copyright © 1999, 2009, Oracle. All rights reserved.

EXPERIMENT-14

AIM – Write a query to find the third highest salary from table.

PLATFORM USED –

Oracle.

COMMANDS USED –

1.CREATE TABLE COMMAND

```
CREATE TABLE TEMPLATE
(
EMP_ID INT PRIMARY KEY,
FIRST_NAME VARCHAR(10),
LAST_NAME VARCHAR(20),
SALARY INT
);
```

2.INSERT COMMAND-

```
INSERT INTO TEMPLATE(EMP_ID, FIRST_NAME, LAST_NAME, SALARY)
VALUES(01,'MORRIS', 'MANO', 15000);
```

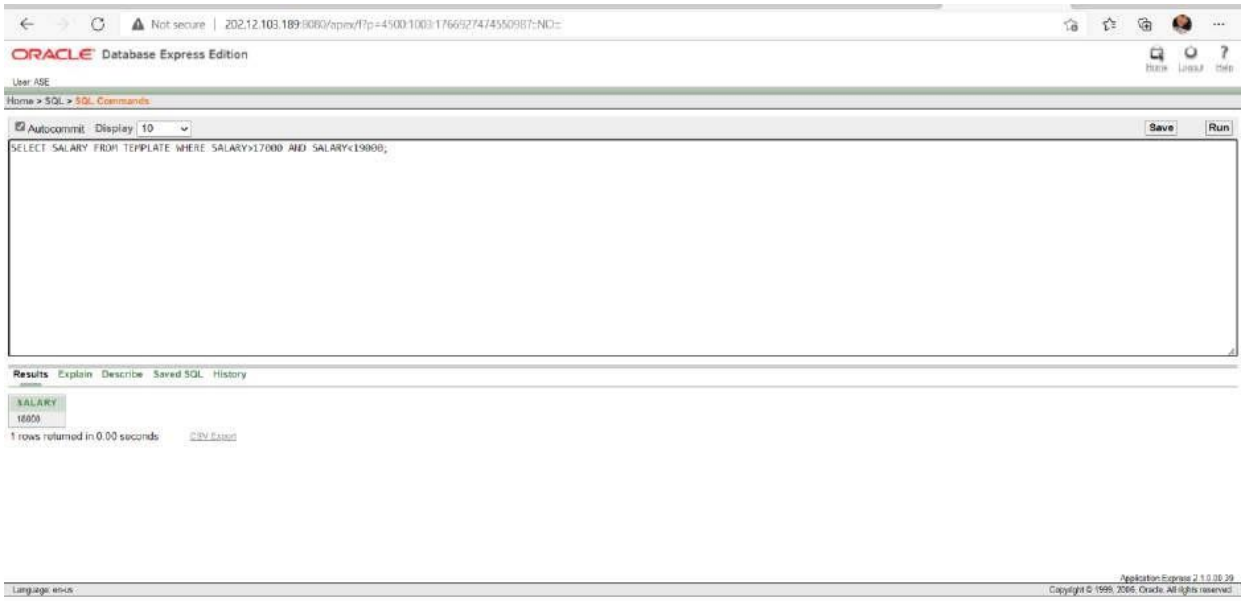
3.SELECT COMMAND-

```
SELECT *FROM TEMPLATE;
```

4.REQUIRED SQL-

```
SELECT SALARY FROM TEMPLATE WHERE SALARY>17000 AND SALARY<19000;
```

OUTPUT:


Not secure
ORACLE Database Express Edition
User: ASE
Home > SQL > SQL Commands
Autocommit
Display 10
Save
Run
SELECT SALARY FROM TEMPLATE WHERE SALARY>17000 AND SALARY<19000;
Results
Explain
Describe
Saved SQL
History
SALARY
18000
1 rows returned in 0.00 seconds
CSV Export
Language: en-us