**ROLL NUMBER: C21134**

**SUBJECT: ADVANCED DATABASE MANAGEMENT SYSTEMS.**

**DIVISION: B**

**Q1. Do the following: 1. Create table Accountwith fields AcctNo, CustName, Branch, AcctBal. 2. Partition the Accounttable based on AcctBal having following range: P1 = Less than 2000 P2 = Less than 5000 P3 = Above 5000 3. Insert five records in AccountTable. 4. Add one more partition P4 which will store records of customers having account balance more than 7000.**

## Source code:

```
SQL> create table account(Acct_No number(10),CustName varchar2(20),Branch varchar2(20),acctBal number(10))
  2  PARTITION BY RANGE (acctBal)
  3  (
  4   PARTITION p1 VALUES LESS THAN (2000),
  5  PARTITION p2 VALUES LESS THAN (5000),
  6    PARTITION p3 VALUES LESS THAN (MAXVALUE)
  7  );

Table created.

SQL> insert into account values(101,'Hrushikesh','jogeshwari',1800);

1 row created.

SQL> insert into account values(102,'Ajay','goregaon',3500);

1 row created.

SQL> insert into account values(103,'Omkar','Malad',4000);
```

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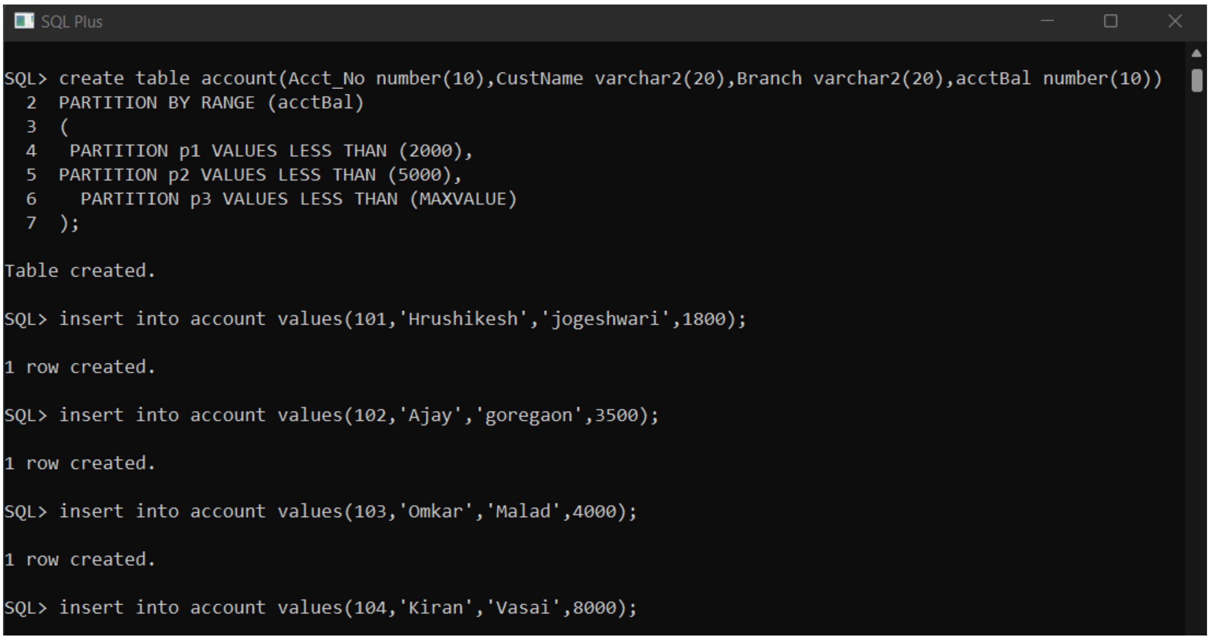
```
1 row created.


SQL> insert into account values(104,'Kiran','Vasai',8000);


1 row created.


SQL> select * from account;


   ACCT_NO CUSTNAME            BRANCH                 ACCTBAL
---------- ------------------- ------------------- ----------
       101 Hrushikesh          jogeshwari                1800
       102 Ajay                goregaon                  3500
       103 Omkar               Malad                     4000
       104 Kiran               Vasai                     8000




SQL> SELECT * FROM USER_TAB_PARTITIONS WHERE TABLE_NAME = 'ACCOUNT';


TABLE_NAME                     COM PARTITION_NAME
------------------------------ --- ------------------------------
SUBPARTITION_COUNT
------------------
HIGH_VALUE
--------------------------------------------------------------------------------
HIGH_VALUE_LENGTH PARTITION_POSITION TABLESPACE_NAME                  PCT_FREE
----------------- ------------------ ------------------------------ ----------
  PCT_USED  INI_TRANS  MAX_TRANS INITIAL_EXTENT NEXT_EXTENT MIN_EXTENT
---------- ---------- ---------- -------------- ----------- ----------
MAX_EXTENT   MAX_SIZE PCT_INCREASE  FREELISTS FREELIST_GROUPS LOGGING COMPRESS
---------- ---------- ------------ ---------- --------------- ------- --------
```

```
COMPRESS_FOR   NUM_ROWS     BLOCKS EMPTY_BLOCKS  AVG_SPACE  CHAIN_CNT

------------ ---------- ---------- ------------ ---------- ----------

AVG_ROW_LEN SAMPLE_SIZE LAST_ANAL BUFFER_ FLASH_C CELL_FL GLO USE IS_

----------- ----------- --------- ------- ------- ------- --- --- ---

PARENT_TABLE_PARTITION        INT SEG

------------------------------ --- ---

ACCOUNT                    NO  P1


TABLE_NAME                    COM PARTITION_NAME

------------------------------ --- ------------------------------

SUBPARTITION_COUNT

------------------

HIGH_VALUE
```

## Output Screenshots:



```
SQL> create table account(Acct_No number(10),CustName varchar2(20),Branch varchar2(20),acctBal number(10))
  2  PARTITION BY RANGE (acctBal)
  3  (
  4   PARTITION p1 VALUES LESS THAN (2000),
  5  PARTITION p2 VALUES LESS THAN (5000),
  6    PARTITION p3 VALUES LESS THAN (MAXVALUE)
  7  );

Table created.

SQL> insert into account values(101,'Hrushikesh','jogeshwari',1800);

1 row created.

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SQL> insert into account values(103,'Omkar','Malad',4000);

1 row created.

SQL> insert into account values(104,'Kiran','Vasai',8000);
```

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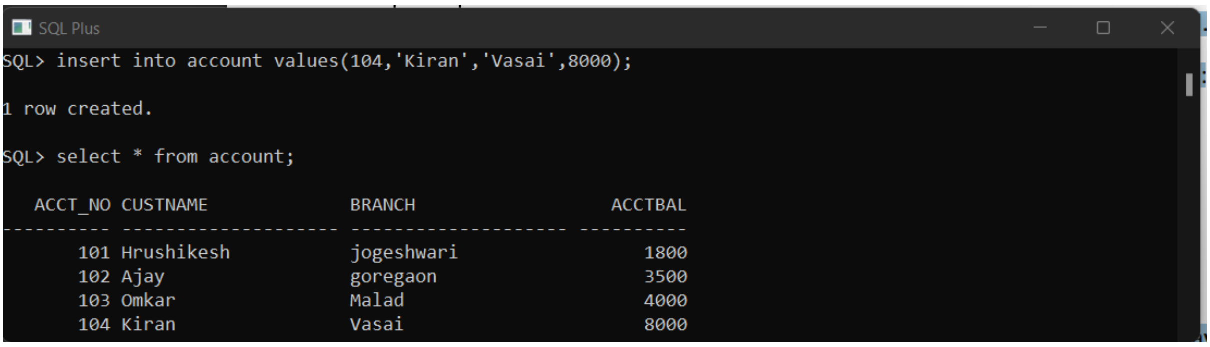
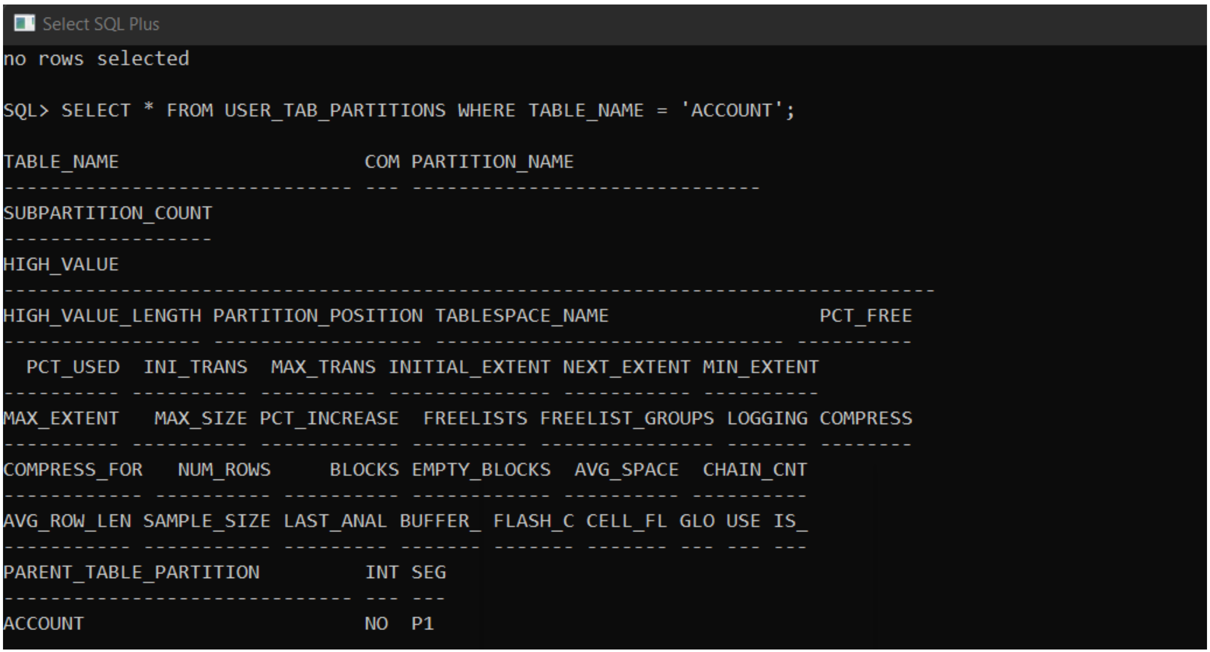
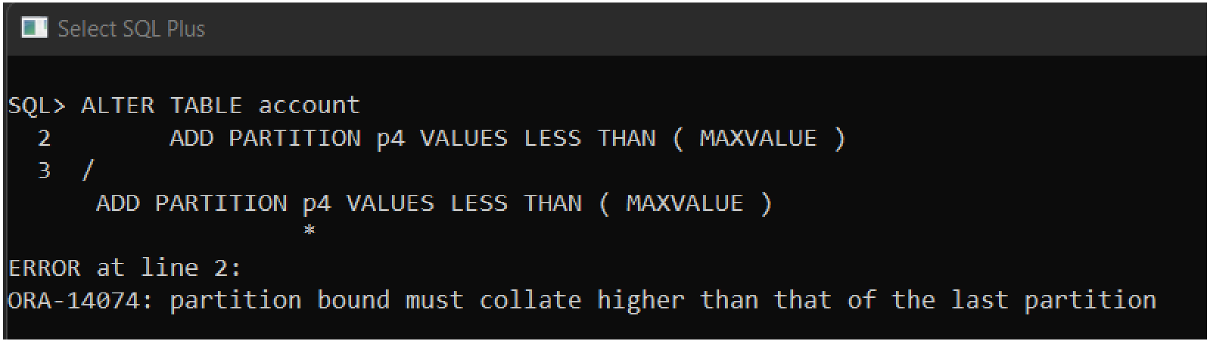


```
SQL> insert into account values(104,'Kiran','Vasai',8000);

1 row created.

SQL> select * from account;

   ACCT_NO CUSTNAME             BRANCH               ACCTBAL
---------- -------------------- -------------------- ----------
       101 Hrushikesh           jogeshwari                 1800
       102 Ajay                 goregaon                   3500
       103 Omkar                Malad                      4000
       104 Kiran                Vasai                      8000
```



```
no rows selected

SQL> SELECT * FROM USER_TAB_PARTITIONS WHERE TABLE_NAME = 'ACCOUNT';

TABLE_NAME                     COM PARTITION_NAME
------------------------------ --- ------------------------------
SUBPARTITION_COUNT
------------------
HIGH_VALUE
--------------------------------------------------------------------------------
HIGH_VALUE_LENGTH PARTITION_POSITION TABLESPACE_NAME                  PCT_FREE
----------------- ------------------ ------------------------------ ----------
  PCT_USED  INI_TRANS  MAX_TRANS INITIAL_EXTENT NEXT_EXTENT MIN_EXTENT
---------- ---------- ---------- -------------- ----------- ----------
MAX_EXTENT   MAX_SIZE PCT_INCREASE  FREELISTS FREELIST_GROUPS LOGGING COMPRESS
---------- ---------- ------------ ---------- --------------- ------- --------
COMPRESS_FOR   NUM_ROWS     BLOCKS EMPTY_BLOCKS  AVG_SPACE  CHAIN_CNT
------------ ---------- ---------- ------------ ---------- ----------
AVG_ROW_LEN SAMPLE_SIZE LAST_ANAL BUFFER_ FLASH_C CELL_FL GLO USE IS_
----------- ----------- --------- ------- ------- ------- --- --- ---
PARENT_TABLE_PARTITION         INT SEG
------------------------------ --- ---
ACCOUNT                        NO  P1
```



```
SQL> ALTER TABLE account
  2        ADD PARTITION p4 VALUES LESS THAN ( MAXVALUE )
  3  /
      ADD PARTITION p4 VALUES LESS THAN ( MAXVALUE )
                    *
ERROR at line 2:
ORA-14074: partition bound must collate higher than that of the last partition
```

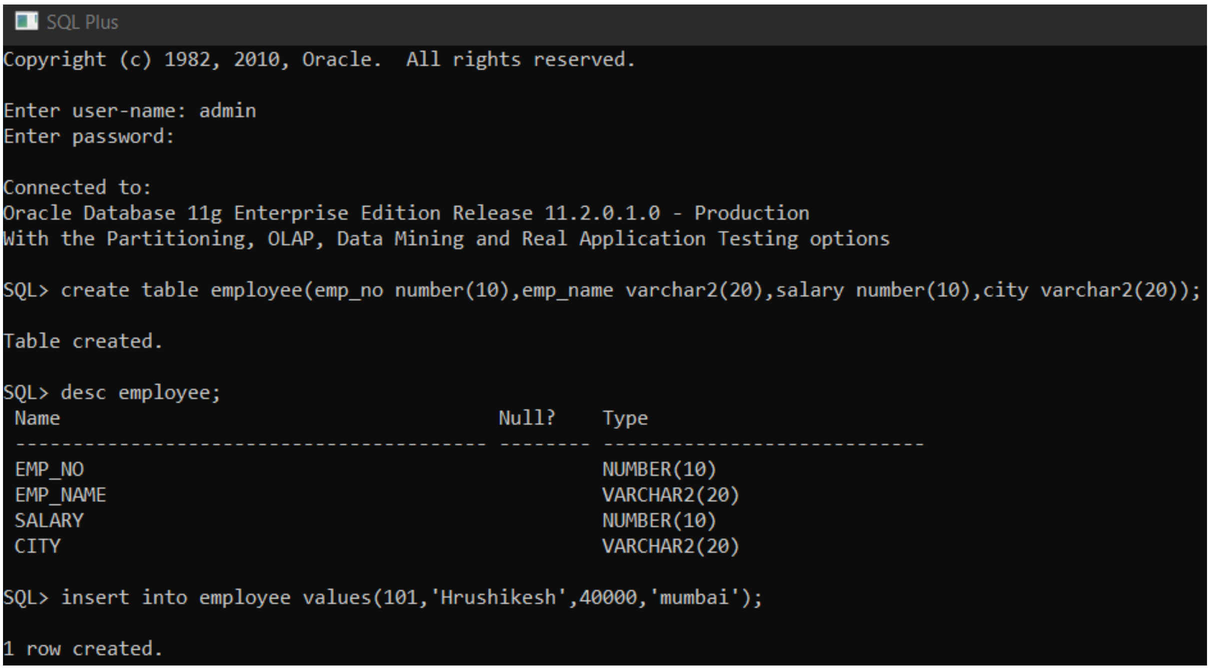
## Q2.Create table EMP in oracle having field Emp_no,Emp_name ,salary,city. 1. Insert 5 records into it 2. Fetch this table in Pentaho 3. Sort salary field in Descending order 4. Save changes in target table Reflect the changes in SQL

## Source code:

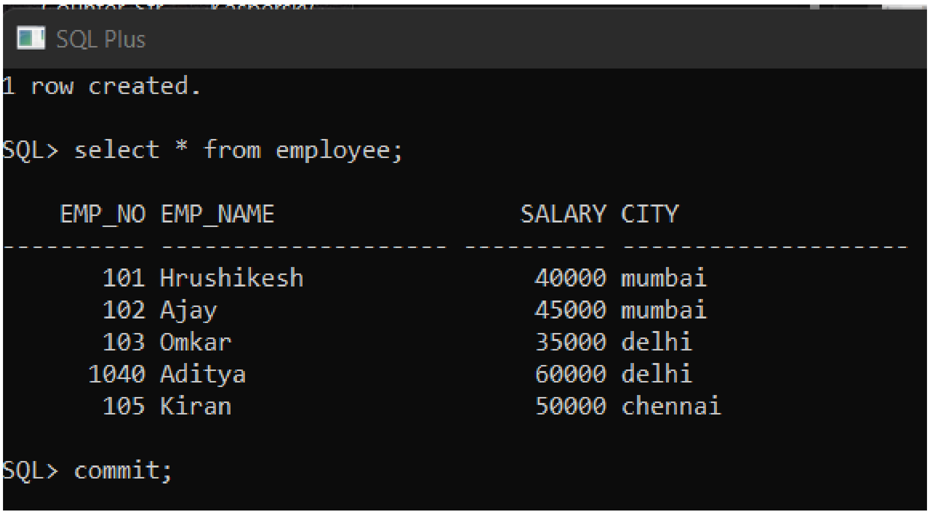
```
SQL*Plus: Release 11.2.0.1.0 Production on Wed Mar 23 10:54:45 2022


Copyright (c) 1982, 2010, Oracle.  All rights reserved.


Enter user-name: admin
Enter password:


Connected to:
Oracle Database 11g Enterprise Edition Release 11.2.0.1.0 - Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options


SQL> select * from employee;


    EMP_NO EMP_NAME                 SALARY CITY
---------- -------------------- ---------- --------------------
       101 Hrushikesh                40000 mumbai
       102 Ajay                      45000 mumbai
       103 Omkar                     35000 delhi
      1040 Aditya                    60000 delhi
       105 Kiran                     50000 chennai


SQL> select * from employee_outputn;


    EMP_NO EMP_NAME                 SALARY CITY
---------- -------------------- ---------- --------------------
      1040 Aditya                    60000 delhi
```

| | | | |
|---|---|---|---|
| 105 | Kiran | 50000 | chennai |
| 102 | Ajay | 45000 | mumbai |
| 101 | Hrushikesh | 40000 | mumbai |
| 103 | Omkar | 35000 | delhi |

# **Output:**



```
Copyright (c) 1982, 2010, Oracle.  All rights reserved.

Enter user-name: admin
Enter password:

Connected to:
Oracle Database 11g Enterprise Edition Release 11.2.0.1.0 - Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options

SQL> create table employee(emp_no number(10),emp_name varchar2(20),salary number(10),city varchar2(20));

Table created.

SQL> desc employee;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 EMP_NO                                             NUMBER(10)
 EMP_NAME                                           VARCHAR2(20)
 SALARY                                             NUMBER(10)
 CITY                                               VARCHAR2(20)

SQL> insert into employee values(101,'Hrushikesh',40000,'mumbai');

1 row created.
```



```
1 row created.

SQL> select * from employee;

    EMP_NO EMP_NAME                 SALARY CITY
---------- -------------------- ---------- --------------------
       101 Hrushikesh                40000 mumbai
       102 Ajay                      45000 mumbai
       103 Omkar                     35000 delhi
      1040 Aditya                    60000 delhi
       105 Kiran                     50000 chennai

SQL> commit;
```

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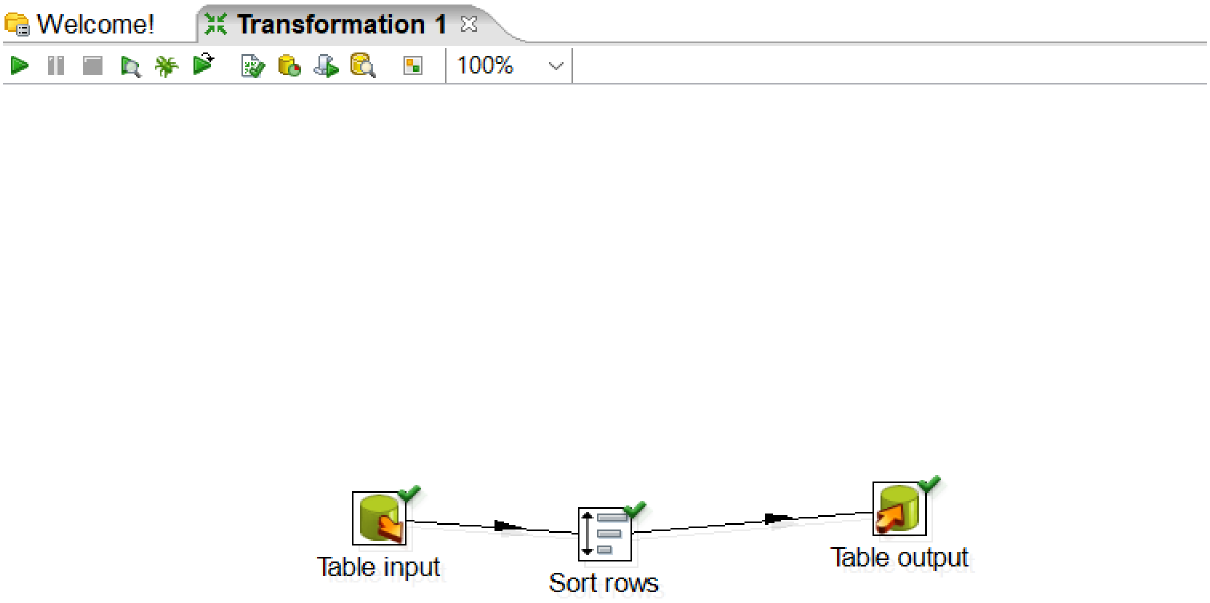
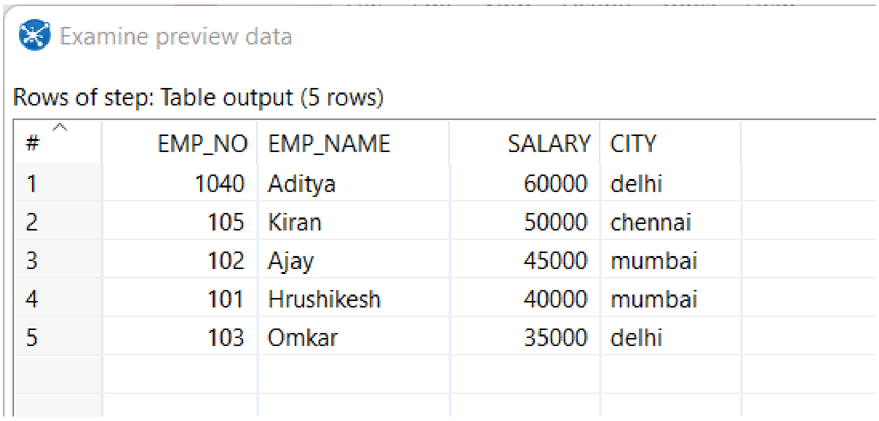
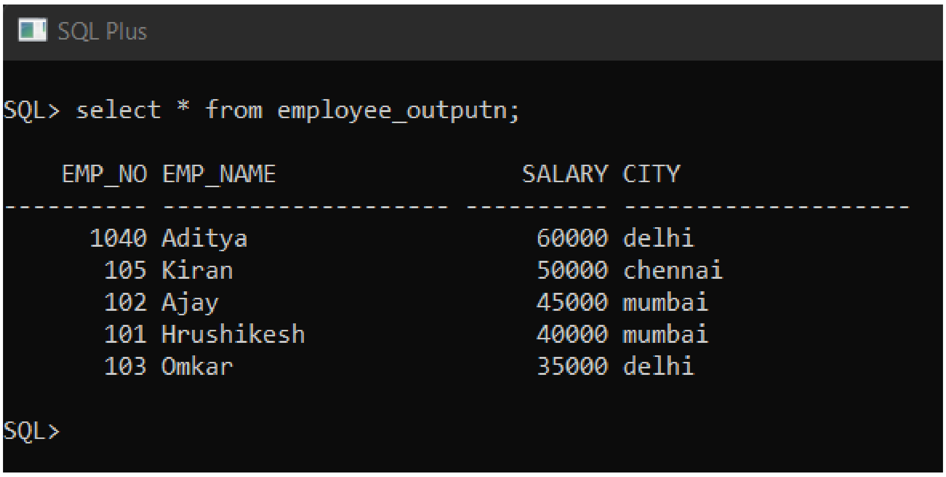



Examine preview data

Rows of step: Table output (5 rows)

| # | EMP_NO | EMP_NAME | SALARY | CITY |
|---|---|---|---|---|
| 1 | 1040 | Aditya | 60000 | delhi |
| 2 | 105 | Kiran | 50000 | chennai |
| 3 | 102 | Ajay | 45000 | mumbai |
| 4 | 101 | Hrushikesh | 40000 | mumbai |
| 5 | 103 | Omkar | 35000 | delhi |


SQL Plus

```
SQL> select * from employee_outputn;

    EMP_NO EMP_NAME                 SALARY CITY
---------- -------------------- ---------- --------------------
      1040 Aditya                    60000 delhi
       105 Kiran                     50000 chennai
       102 Ajay                      45000 mumbai
       101 Hrushikesh                40000 mumbai
       103 Omkar                     35000 delhi

SQL>
```