

EXPERIMENT 4

Name:- Omkar Kore

Class: Btech C

Roll Number:- BTC19

Batch: C1

PART A) RANGE PARTITIONING:

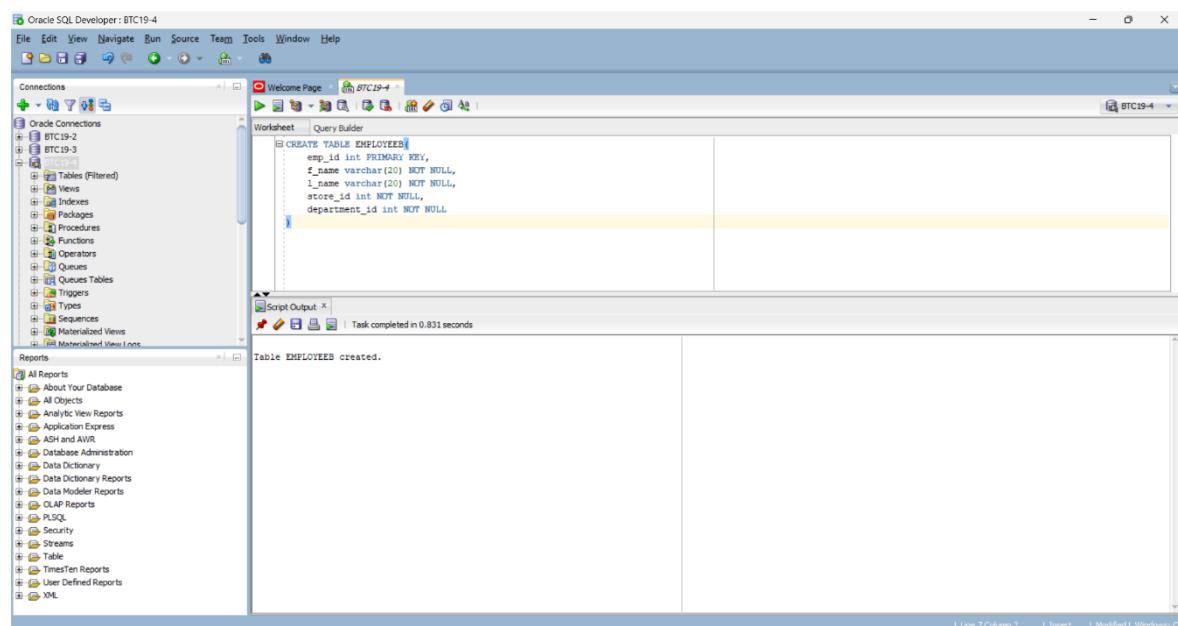
```
CREATE TABLE EMPLOYEEB(
```

```
    emp_id int PRIMARY KEY,  
    f_name varchar(20) NOT NULL,  
    l_name varchar(20) NOT NULL,  
    store_id int NOT NULL,  
    department_id int NOT NULL  
)
```

```
PARTITION BY RANGE (emp_id) (
```

```
    PARTITION P0 VALUES LESS THAN (5),  
    PARTITION P1 VALUES LESS THAN (10),  
    PARTITION P2 VALUES LESS THAN (15),  
    PARTITION P3 VALUES LESS THAN (25)
```

```
);
```



```
INSERT INTO EMPLOYEEB VALUES (1, 'Omkar', 'Kore', 101, 201);
INSERT INTO EMPLOYEEB VALUES (2, 'Aarav', 'Deshmukh', 102, 202);
INSERT INTO EMPLOYEEB VALUES (3, 'Priya', 'Patil', 103, 203);
INSERT INTO EMPLOYEEB VALUES (4, 'Rohan', 'Kulkarni', 104, 204);
INSERT INTO EMPLOYEEB VALUES (5, 'Sakshi', 'Joshi', 105, 205);
INSERT INTO EMPLOYEEB VALUES (6, 'Aditya', 'More', 106, 206);
INSERT INTO EMPLOYEEB VALUES (7, 'Sneha', 'Jadhav', 107, 207);
INSERT INTO EMPLOYEEB VALUES (8, 'Tushar', 'Pawar', 108, 208);
INSERT INTO EMPLOYEEB VALUES (9, 'Anjali', 'Shinde', 109, 209);
INSERT INTO EMPLOYEEB VALUES (10, 'Nikhil', 'Gaikwad', 110, 210);
INSERT INTO EMPLOYEEB VALUES (11, 'Kiran', 'Salunkhe', 111, 211);
INSERT INTO EMPLOYEEB VALUES (12, 'Manasi', 'Bhosale', 112, 212);
INSERT INTO EMPLOYEEB VALUES (13, 'Rahul', 'Mane', 113, 213);
INSERT INTO EMPLOYEEB VALUES (14, 'Pooja', 'Chavan', 114, 214);
INSERT INTO EMPLOYEEB VALUES (15, 'Shreya', 'Naik', 115, 215);
INSERT INTO EMPLOYEEB VALUES (16, 'Siddharth', 'Ghorpade', 116, 216);
INSERT INTO EMPLOYEEB VALUES (17, 'Tejaswini', 'Sawant', 117, 217);
INSERT INTO EMPLOYEEB VALUES (18, 'Chaitanya', 'Patil', 118, 218);
INSERT INTO EMPLOYEEB VALUES (19, 'Neha', 'Kadam', 119, 219);
INSERT INTO EMPLOYEEB VALUES (20, 'Vikas', 'Phadke', 120, 220);
```

```
SELECT * FROM EMPLOYEEB;
```

```

SELECT * FROM EMPLOYEES;

```

EMP_ID	F_NAME	L_NAME	STORE_ID	DEPARTMENT_ID
1	Umkar	Kore	101	201
2	Aarav	Deshmukh	102	202
3	Priya	Patil	103	203
4	Rohan	Kulkarni	104	204
5	Sakshi	Joshi	105	205
6	Aditya	More	106	206
7	Sneha	Jadhav	107	207
8	Tushar	Pawar	108	208
9	Anjali	Shinde	109	209
10	Mikhail	Gaiwad	110	210
11	Ekrat	Salunkhe	111	211
12	Manasi	Bhosale	112	212
13	Rahul	Mane	113	213
14	Pooja	Chavan	114	214
15	Shreya	Naik	115	215
16	Siddharth	Ghorpade	116	216
17	Tejaswini	Sawant	117	217
18	Chaitanya	Patil	118	218
19	Neha	Kadam	119	219
20	Vikas	Phadke	120	220

--QUERY 1

```

SELECT * FROM employeeB PARTITION (P1)
UNION
SELECT * FROM employeeB PARTITION (P2);

```

```

--QUERY 1
SELECT * FROM employeeB PARTITION (P1)
UNION
SELECT * FROM employeeB PARTITION (P2);

```

EMP_ID	F_NAME	L_NAME	STORE_ID	DEPARTMENT_ID
1	Sakshi	Joshi	105	205
2	Aditya	More	106	206
3	Sneha	Jadhav	107	207
4	Tushar	Pawar	108	208
5	Anjali	Shinde	109	209
6	Mikhail	Gaiwad	110	210
7	Ekrat	Salunkhe	111	211
8	Manasi	Bhosale	112	212
9	Rahul	Mane	113	213
10	Pooja	Chavan	114	214

--QUERY 2

```

SELECT * FROM employeeb PARTITION (P0) WHERE f_name LIKE 'S%'
UNION
SELECT * FROM employeeb PARTITION (P1) WHERE f_name LIKE 'S%';

```

The screenshot shows the Oracle SQL Developer interface. The left sidebar contains 'Connections' (with three entries: BTC19-2, BTC19-3, and BTC19-4) and 'Reports'. The main area has a 'Worksheet' tab active, displaying a query in the 'Query Builder' pane:

```
--QUERY 3
SELECT * FROM employeeb PARTITION (P0) WHERE f_name LIKE 'S%'
UNION
SELECT * FROM employeeb PARTITION (P1) WHERE f_name LIKE 'S%';
```

The 'Script Output' pane shows the results of the query:

EMP_ID	F_NAME	L_NAME	STORE_ID	DEPARTMENT_ID
1	Sakshi	Joshi	105	205
2	Sneha	Jadav	107	207

--QUERY 3

```
SELECT department_id, COUNT(*) AS total_employees
FROM employeeb PARTITION (P1)
GROUP BY department_id
UNION
SELECT department_id, COUNT(*)
FROM employeeb PARTITION (P2)
GROUP BY department_id
UNION
SELECT department_id, COUNT(*)
FROM employeeb PARTITION (P3)
GROUP BY department_id;
```

```

--QUERY 3
SELECT department_id, COUNT(*) AS total_employees
FROM employee PARTITION (P1)
GROUP BY department_id
UNION
SELECT department_id, COUNT(*)
FROM employee PARTITION (P2)
GROUP BY department_id
UNION
SELECT department_id, COUNT(*)
FROM employee PARTITION (P3)

```

DEPARTMENT_ID	TOTAL_EMPLOYEES
1	205
2	206
3	207
4	208
5	209
6	210
7	211
8	212
9	213
10	214
11	215
12	216
13	217
14	218
15	219
16	220

--PART B(HASH PARTITIONING)

```

CREATE TABLE sales_hash (
    salesman_id NUMBER(5) PRIMARY KEY,
    salesman_name VARCHAR2(30),
    sales_amount NUMBER(10),
    week_no NUMBER(2)
)
PARTITION BY HASH (salesman_id) (
    PARTITION sales_p1,
    PARTITION sales_p2,
    PARTITION sales_p3,
    PARTITION sales_p4
);
INSERT INTO sales_hash VALUES (1, 'Omkar', 50000, 1);
INSERT INTO sales_hash VALUES (2, 'Aarav', 45000, 2);
INSERT INTO sales_hash VALUES (3, 'Sneha', 55000, 3);
INSERT INTO sales_hash VALUES (4, 'Rohan', 47000, 4);
INSERT INTO sales_hash VALUES (5, 'Pooja', 60000, 5);

```

```

INSERT INTO sales_hash VALUES (6, 'Aditya', 52000, 6);
INSERT INTO sales_hash VALUES (7, 'Neha', 48000, 7);
INSERT INTO sales_hash VALUES (8, 'Tushar', 51000, 8);
INSERT INTO sales_hash VALUES (9, 'Rahul', 53000, 9);
INSERT INTO sales_hash VALUES (10, 'Manasi', 49000, 10);

```

Oracle SQL Developer : BTC19-4

File Edit View Navigate Run Source Team Tools Window Help

Connections

Welcome Page BTC19-4

Worksheet Query Builder

```
SELECT * FROM sales_hash;
```

Script Output | Query Result | Query Result 1 |

All Rows Fetched: 10 in 0.053 seconds

SALESMAN_ID	SALESMAN_NAME	SALES_AMOUNT	WEEK_NO
1	Aditya	52000	6
2	Rahul	53000	9
3	Manasi	49000	10
4	Aarav	45000	2
5	Pooja	60000	5
6	Tushar	51000	8
7	Omkar	50000	1
8	Sneha	55000	3
9	Rohan	47000	4
10	Neha	48000	7

(more...) | Line 1 Column 26 | Insert | Modified | Windows O

--QUERY 1

```
SELECT * FROM sales_hash PARTITION (sales_p2);
```

Oracle SQL Developer : BTC19-4

File Edit View Navigate Run Source Team Tools Window Help

Connections

Welcome Page BTC19-4

Worksheet Query Builder

```
--QUERY 1
SELECT * FROM sales_hash PARTITION (sales_p2);
```

Script Output | Query Result | Query Result 1 |

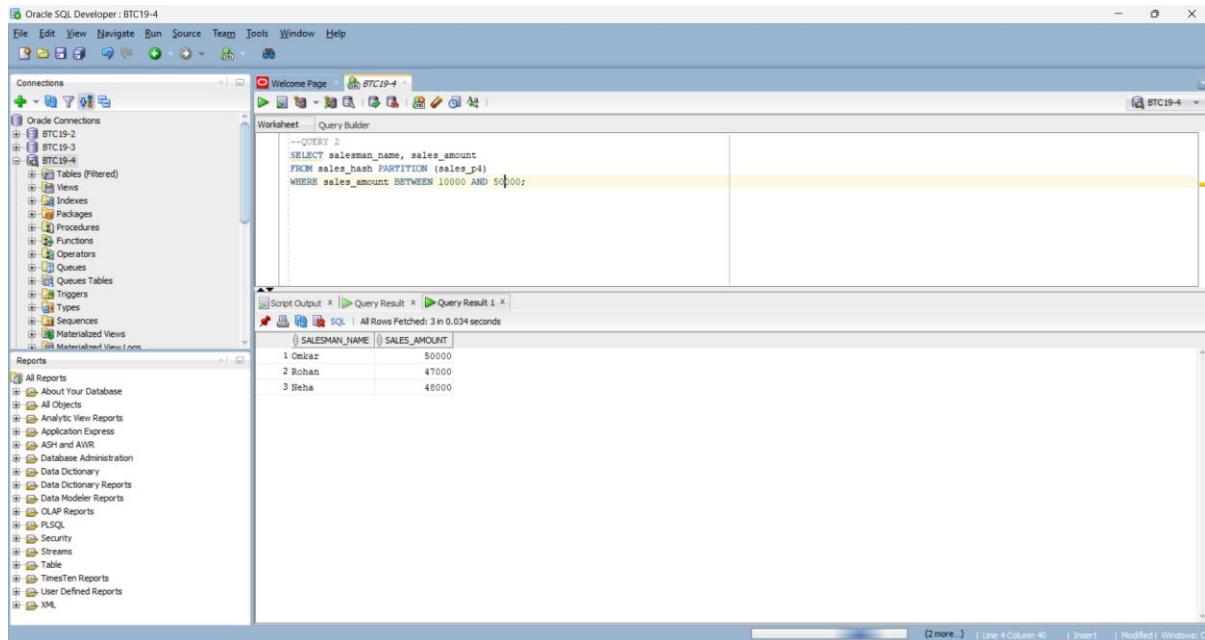
All Rows Fetched: 2 in 0.045 seconds

SALESMAN_ID	SALESMAN_NAME	SALES_AMOUNT	WEEK_NO
2	Rahul	53000	9
3	Manasi	49000	10

(more...) | Line 2 Column 47 | Insert | Modified | Windows O

--QUERY 2

```
SELECT salesman_name, sales_amount  
FROM sales_hash PARTITION (sales_p4)  
WHERE sales_amount BETWEEN 10000 AND 50000;
```

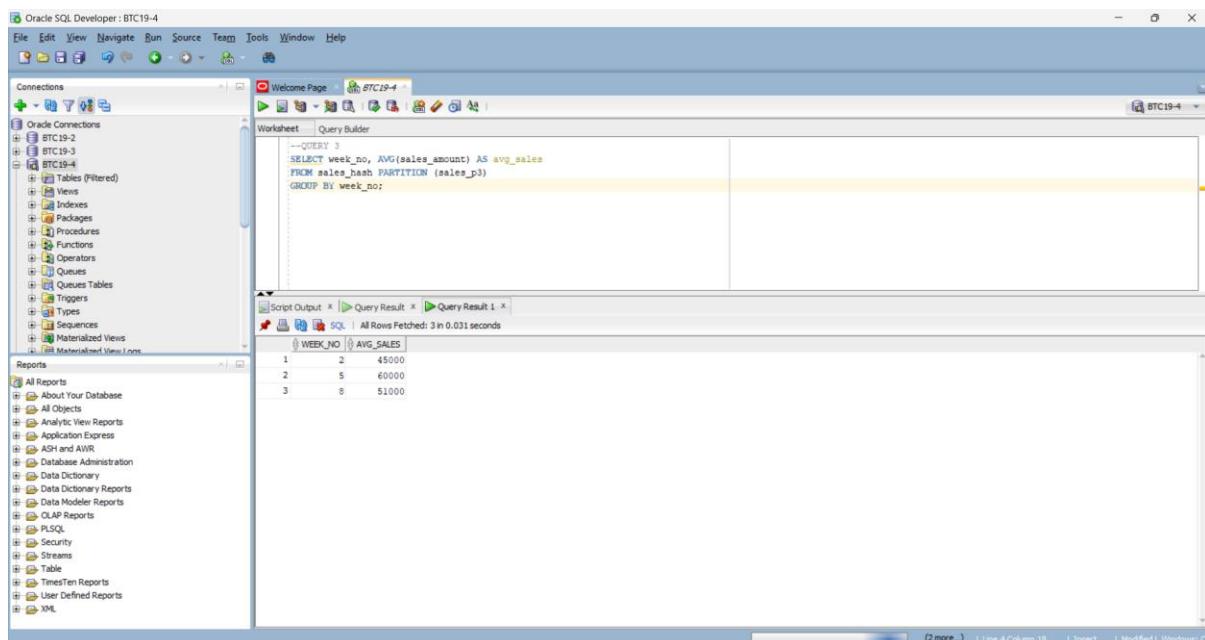


The screenshot shows the Oracle SQL Developer interface. The 'Connections' sidebar on the left lists 'BTC19-2', 'BTC19-3', and 'BTC19-4'. The 'Tables (Filtered)' section under BTC19-4 is expanded, showing various database objects like Views, Indexes, Packages, Procedures, Functions, Operators, Queues, Queues Tables, Triggers, Types, Sequences, and Materialized Views. The 'Worksheet' tab in the center contains the SQL query: '--QUERY 2' followed by the SELECT statement. Below the worksheet is a 'Script Output' tab showing the results of the query. The results are presented in a table:

SALESMAN_NAME	SALES_AMOUNT
1 Omkar	50000
2 Rohan	47000
3 Neha	48000

--QUERY 3

```
SELECT week_no, AVG(sales_amount) AS avg_sales  
FROM sales_hash PARTITION (sales_p3)  
GROUP BY week_no;
```



The screenshot shows the Oracle SQL Developer interface. The 'Connections' sidebar on the left lists 'BTC19-2', 'BTC19-3', and 'BTC19-4'. The 'Tables (Filtered)' section under BTC19-4 is expanded. The 'Worksheet' tab in the center contains the SQL query: '--QUERY 3' followed by the SELECT statement. Below the worksheet is a 'Script Output' tab showing the results of the query. The results are presented in a table:

WEEK_NO	AVG_SALES	
1	2	45000
2	5	60000
3	8	51000