| Oracle | Name: |
|----------|--------|
| Practice | Class: |
| Explain | Date: |

Create a new TABLESPACE:

Name: SHOP LASTNAME SHOP GRIESMAYER

Datafile: shop_lastname1.dbf shop_griesmayer1.dbf

Size: 200 MByte; autoextend up to 300 MByte

Datafile: shop lastname2.dbf shop griesmayer2.dbf

Size: 100 MByte

Keep the SQL-Statements for this task!

Create a new USER:

Name: MYSHOP MYSHOP

The user hold productive data! The data is stored in the ${\tt TABLESPACE}$ ${\tt SHOP}$ LASTNAME.

Create the tables in the schema MYSHOP:

| LASTNAME_PRODUCT | | | | |
|------------------|--------------|---------|-----|--|
| PRODUCT ID | INTEGER | PRIMARY | KEY | |
| PRODUCT_NAME | VARCHAR (20) | | | |
| PRODUCT PRICE | DECIMAL(6,2) | | | |

Add 10 rows.

| LASTNAME_CUSTOMER | | | |
|-------------------|--------------|-------------|--|
| CUSTOMER ID | INTEGER | PRIMARY KEY | |
| FIRST_NAME | VARCHAR (20) | | |
| LADT_NAME | VARCHAR (20) | | |
| EMAIL | VARCHAR (50) | | |
| GENDER | VARCHAR (20) | | |

Add 1000 rows using mockaroo.

https://mockaroo.com/

| LASTNAME_SALES | |
|----------------|---------------|
| SALES_DATE | DATE |
| PRODUCT_ID | INTEGER |
| CUSTOMER_ID | INTEGER |
| PIECES | INTEGER |
| PRICE | DECIMAL(12,2) |
| TAX | DECIMAL(12,2) |

Add 100000 rows.

Create a new USER:

Name: LASTNAME GRIESMAYER

Create statistics for the three tables.

Check the execution plan for an SELECT statement (SALES table):

- GROUP BY
- ORDER BY
- no Index

Explain the explain plan!

Check the execution plan for an SELECT statement (SALES table):

- GROUP BY
- ORDER BY
- WHERE condition
- no Index

Explain the explain plan!

Check the execution plan for an SELECT statement (SALES table):

- GROUP BY
- ORDER BY
- WHERE condition
- INDEX on the condition

Explain the explain plan!

Try to modify the statement, that the index is used and it is not used.

Check the execution plan for an SELECT statement (SALES table):

- GROUP BY
- ORDER BY
- WHERE condition
- INDEX on the condition
- INDEX on the order

Explain the explain plan!

Erstellen Sie ein SQL Statement für:

- HASH JOIN
- NESTED LOOPS
- MERGE JOIN