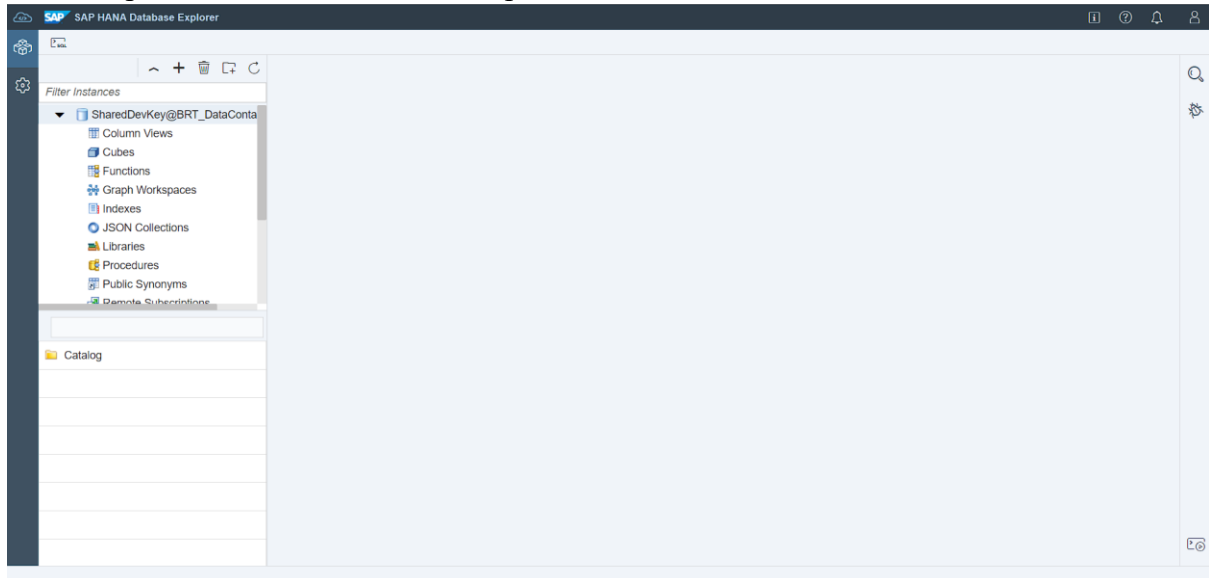


Ujian Tengah Semester

Nama : Mikhael Aditha Sembiring Meliala
NIM : 201402079
Mata Kuliah : Enterprise Development Software

Module 8: Share a Subset of Your Data Securely

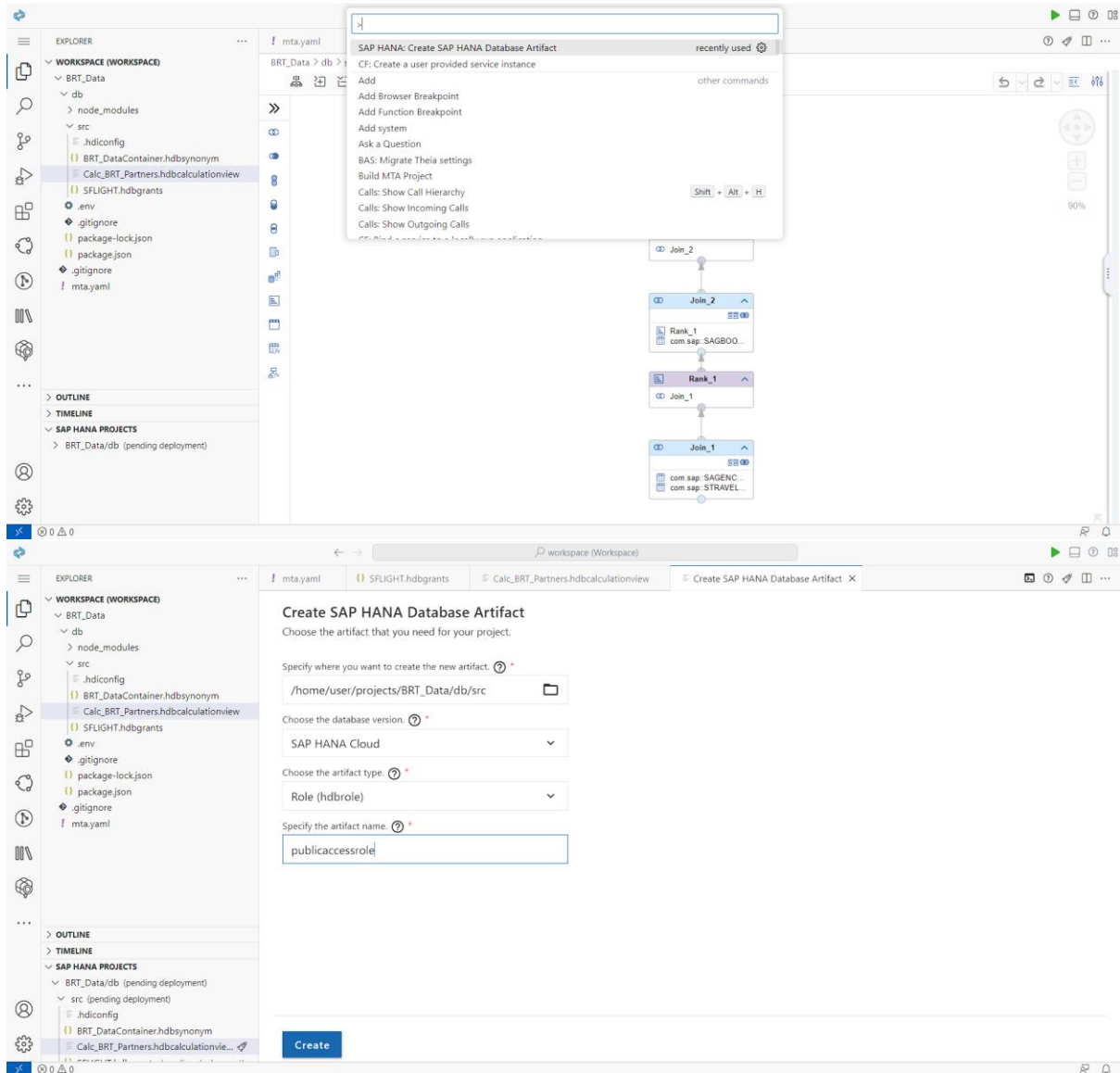
1. Open SAP HANA Database Explorer



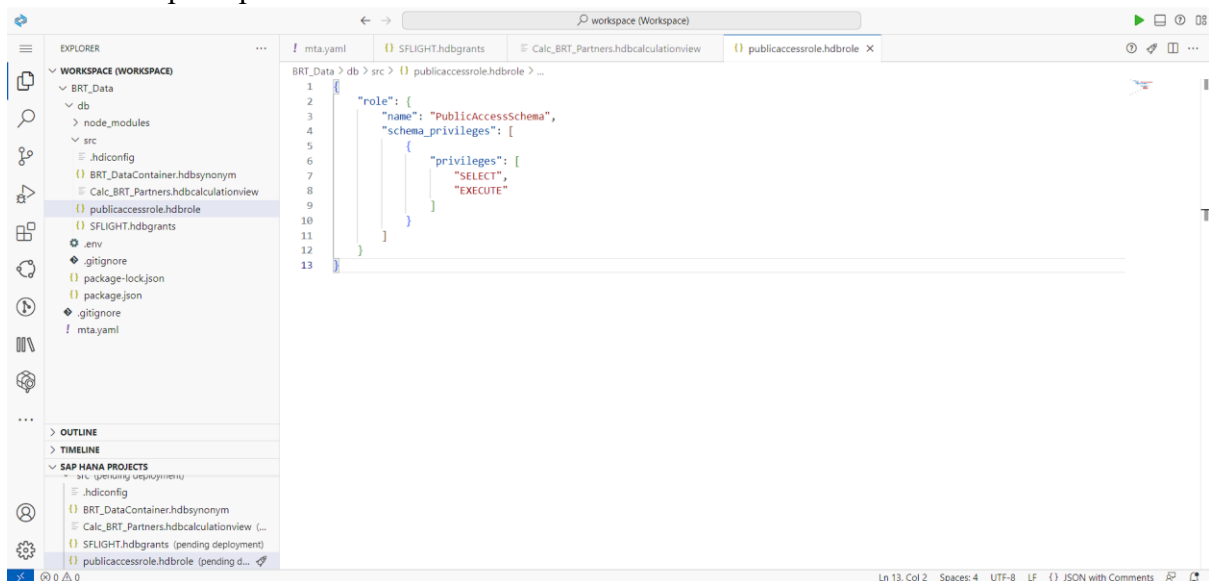
2. Generate SELECT statement



3. Create SAP HANA Database Artifact



4. Set up the public access role



5. Redeploy the project

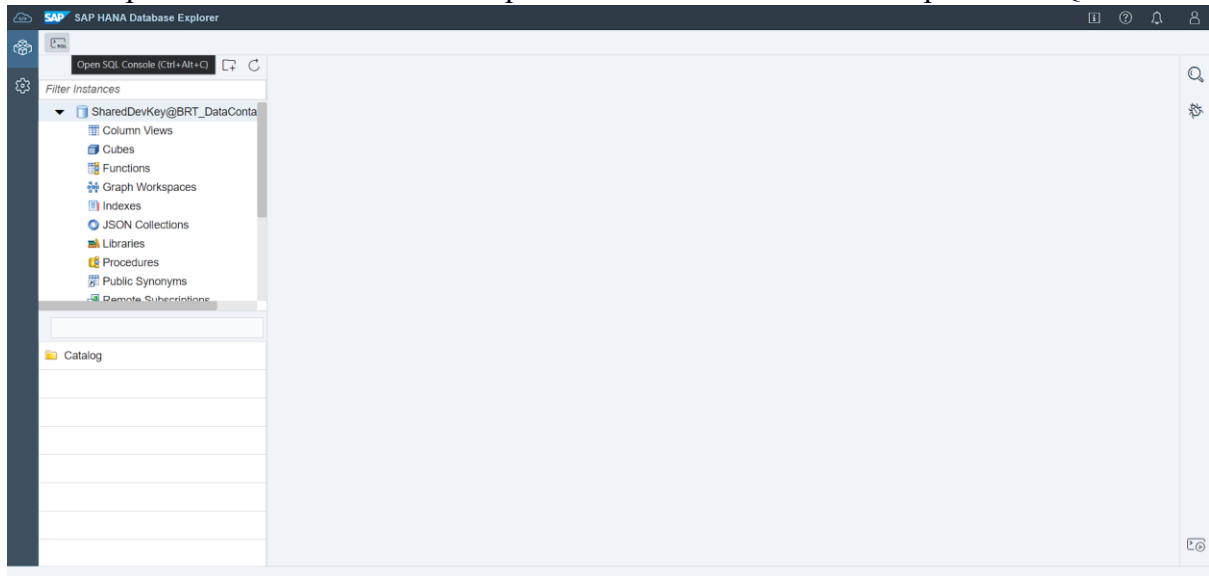
The screenshot displays the SAP HANA Studio interface during a redeployment process. The Explorer pane on the left shows the project structure under 'WORKSPACE (WORKSPACE)', including 'BRT_Data', 'db', 'node_modules', 'src', and 'publicaccessrole.hdbrole'. The 'src' folder is expanded, showing files like 'BRT_DataContainer.hdbsynonym', 'Calc_BRT_Partners.hdbcalculationview', and 'publicaccessrole.hdbrole'. The 'publicaccessrole.hdbrole' file is selected, and its content is visible in the main editor. The content is a JSON-like structure defining a role with schema privileges and specific privileges.

```
1 {
2   "role": {
3     "name": "PublicAccessSchema",
4     "schema_privileges": [
5       {
6         "privileges": [
7           "SELECT",
8           "EXECUTE"
9         ]
10      }
11    ]
12  }
13 }
```

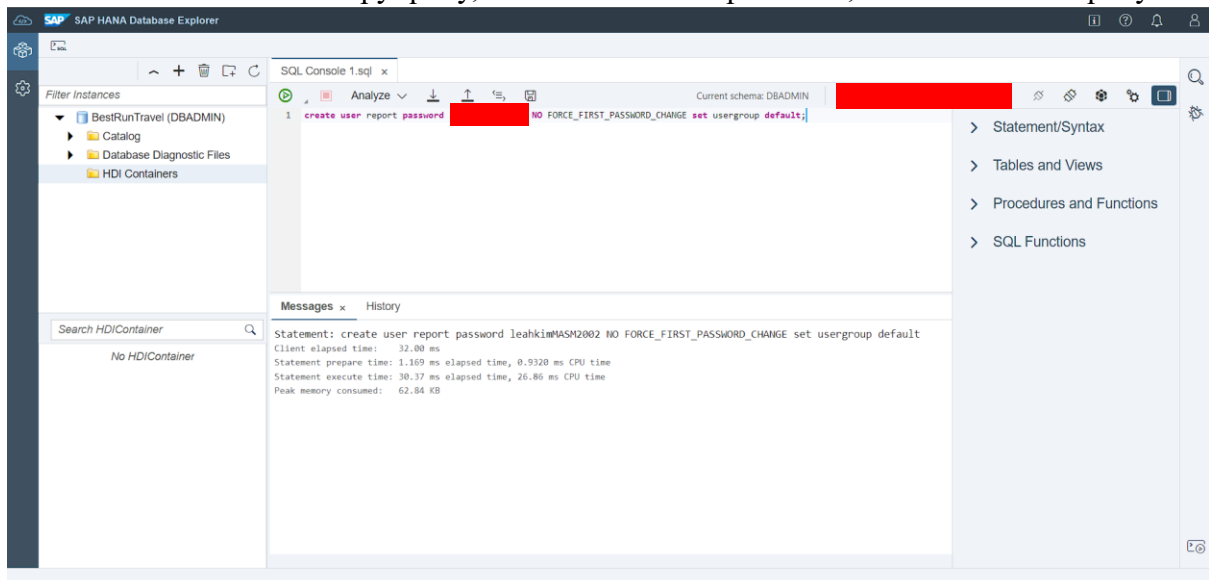
The 'Deploy' button is visible next to the 'src' folder. Below the editor, the 'TERMINAL' pane shows the deployment logs, indicating successful deployment of the role and calculation view.

```
SAP HANA: Deploy module at /home/user/project/BRT_Data/db (BRT_Data) - Task ✓ + - ...
Postprocessing "src/BRT_DataContainer.hdbsynonym"... ok (0s 0ms)
Postprocessing "src/publicaccessrole.hdbrole"...
Postprocessing "src/publicaccessrole.hdbrole"... ok (0s 947ms)
Postprocessing deployed files... ok (0s 959ms)
Finalizing...
Finalizing... ok (0s 23ms)
Make succeeded (0 warnings): 2 files deployed (effective 2), 0 files undeployed (effective 0), 0 dependent files redeployed
Making... ok (1s 389ms)
Enabling table replication for the container schema "BRT_DATA_HDI_DB_1"...
Enabling table replication for the container schema "BRT_DATA_HDI_DB_1"... ok (0s 10ms)
Starting make in the container "BRT_DATA_HDI_DB_1" with 2 files to deploy, 0 files to undeploy... ok (1s 432ms)
Deploying to the container "BRT_DATA_HDI_DB_1"... ok (1s 624ms)
No default-access-role handling needed; global role "BRT_DATA_HDI_DB_1::access_role" will not be adapted
Unlocking the container "BRT_DATA_HDI_DB_1"... ok (0s 0ms)
Unlocking the container "BRT_DATA_HDI_DB_1"... ok (0s 0ms)
Deployment to container "BRT_DATA_HDI_DB_1" done [Deployment ID: none].
Deployment ended at 2023-10-16 17:50:37
(3s 765ms)
Terminal will be reused by tasks, press any key to close it.
```

6. Open SAP HANA Database Explorer with HDI Container and open new SQL console



7. Create new user. Copy query, fill with account's password, and then run the query



SAP HANA Database Explorer

Filter Instances

- BestRunTravel (DBADMIN)
 - Catalog
 - Database Diagnostic Files
 - HDI Containers

Search HDI/Container

No HDI/Container

SQL Console 1.sql x

Current schema: DBADMIN

```
1 - grant BRT_DATA_HDI_DB_1."PublicAccessSchema" to report
```

Messages x History

Statement: grant BRT_DATA_HDI_DB_1."PublicAccessSchema" to report
Client elapsed time: 4.000 ms
Statement prepare time: 2.027 ms elapsed time, 1.742 ms CPU time
Statement execute time: 2.016 ms elapsed time, 0.4530 ms CPU time
Peak memory consumed: 63.19 KB

- > Statement/Syntax
- > Tables and Views
- > Procedures and Functions
- > SQL Functions

SAP HANA Database Explorer

Filter Instances

- BestRunTravel (DBADMIN)
 - Catalog
 - Database Diagnostic Files
 - HDI Containers

Search HDI/Container

No HDI/Container

SQL Console 1.sql x SQL Console 2.sql x

Current schema: REPORT

```
1 - CONNECT report PASSWORD [REDACTED]
```

Messages x History

Statement: CONNECT report PASSWORD [REDACTED]
Rows affected: 0
Client elapsed time: 39.00 ms
Statement prepare time: 0.9940 ms elapsed time, 0.7320 ms CPU time
Statement execute time: 36.82 ms elapsed time, 14.29 ms CPU time
Peak memory consumed: 62.14 KB

- > Statement/Syntax
- > Tables and Views
- > Procedures and Functions
- > SQL Functions

SAP HANA Database Explorer

Filter Instances

- BestRunTravel (DBADMIN)
 - Catalog
 - Database Diagnostic Files
 - HDI Containers

Search HDI/Container

No HDI/Container

SQL Console 1.sql x SQL Console 2.sql x

Current schema: REPORT

```
1 - SELECT TOP 1000
2   "AGENCYNUM",
3   "NAME",
4   "ORDERDAY",
5   SUM("NUMBOOKINGS") AS "NUMBOOKINGS",
6   SUM("DAYCOUNT") AS "DAYCOUNT"
7 FROM "BRT_DATA_HDI_DB_1"."Calc_BRT_Partners"
8 GROUP BY "AGENCYNUM", "NAME", "ORDERDAY"
```

Result x Messages x History

Rows (5)

	AGENCYNUM	NAME	ORDERDAY	NUMBOOKINGS	DAYCOUNT
1	00000122	Fly Low	THURSDAY	27869	4037
2	00000118	Asia By Plane	TUESDAY	27416	4004
3	00000101	Bella Italia	THURSDAY	27866	4038
4	00000284	Rainy, Stormy, Cloudy	MONDAY	27870	4108
5	00000109	Kangeroos	THURSDAY	27867	4095

- > Statement/Syntax
- > Tables and Views (1)
- > Procedures and Functions
- > SQL Functions (1)