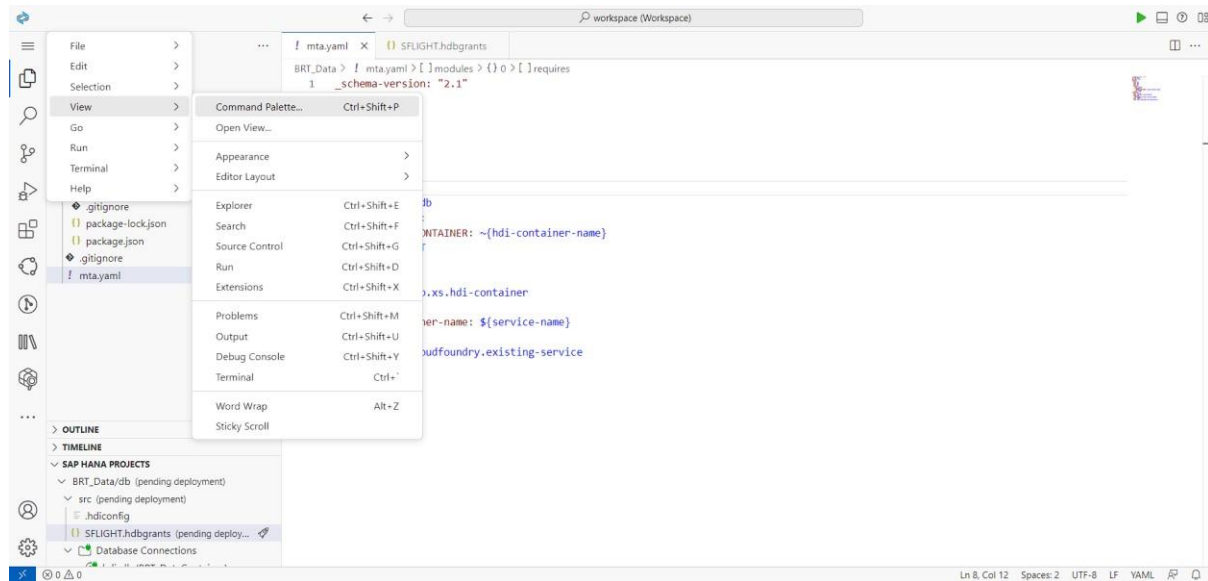


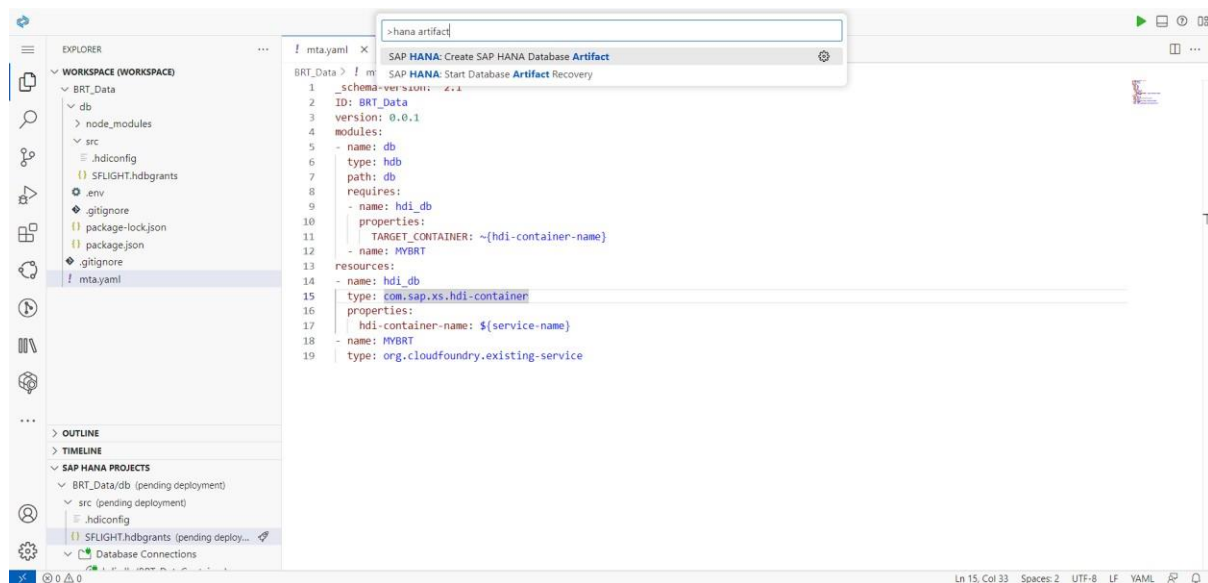
Nama : Irma Nathasya Br Ginting  
NIM : 201402136  
Mata Kuliah : UTS Enterprise Development Software

## 7. Create calculation view

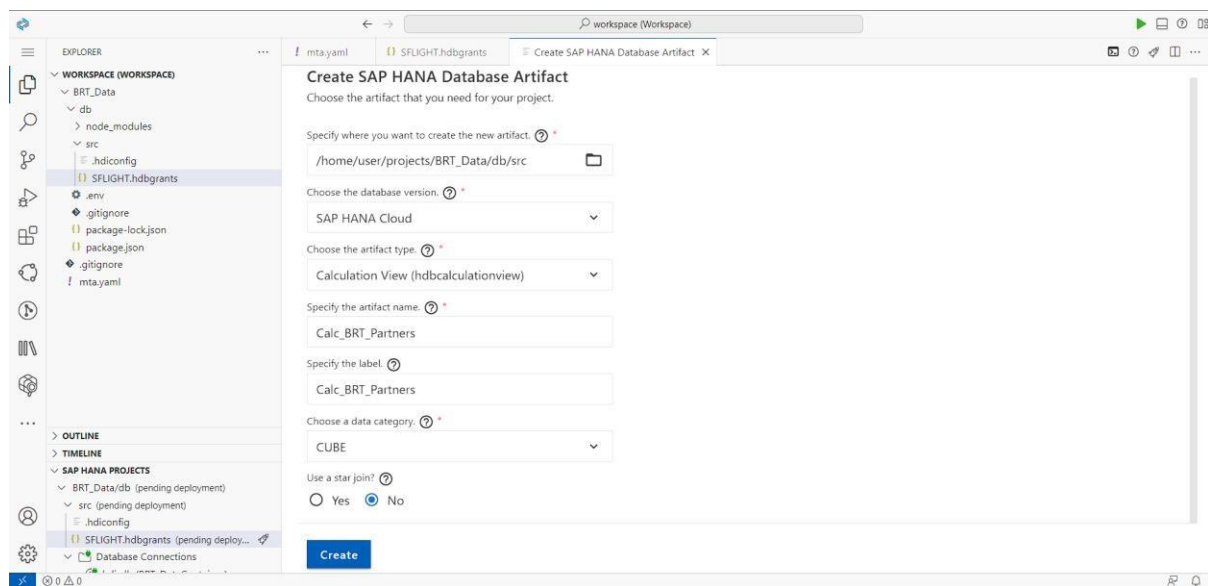
- Pilih file > View > Command Palette (Ctrl+Shift+P)



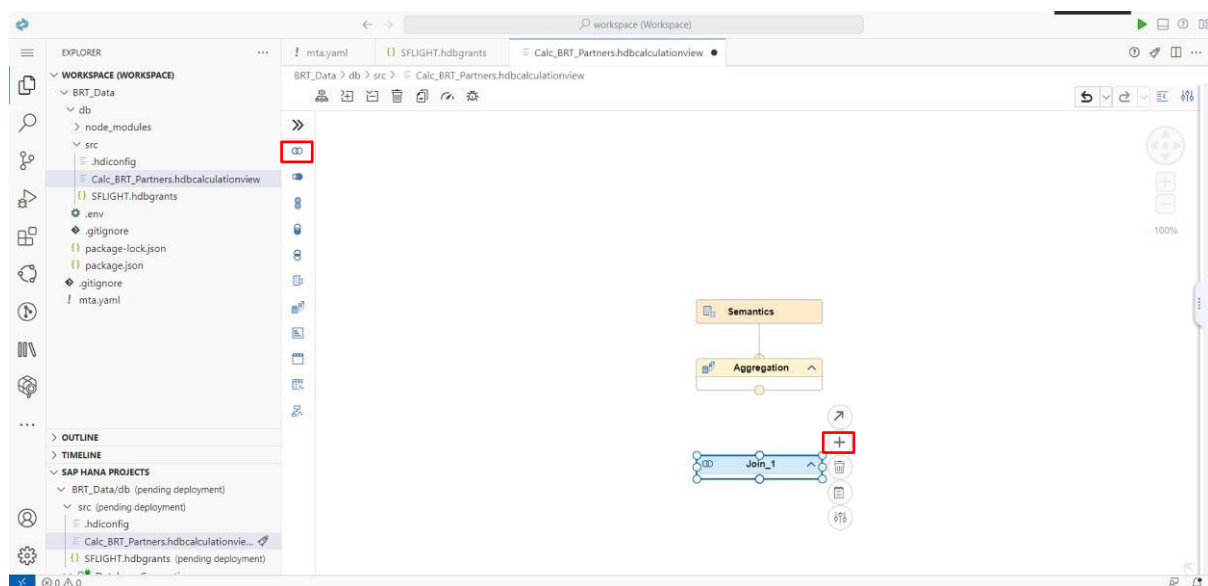
- Search “SAP HANA: Create SAP HANA Database Artifact”



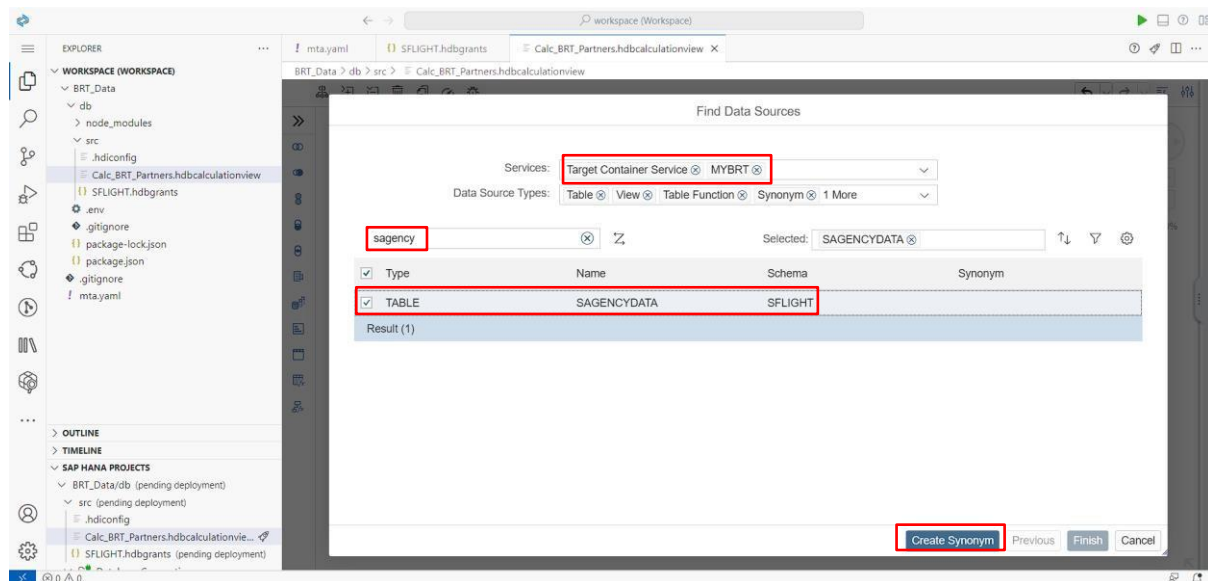
- Isi bagian - bagian yang diperlukan, lalu klik "creat



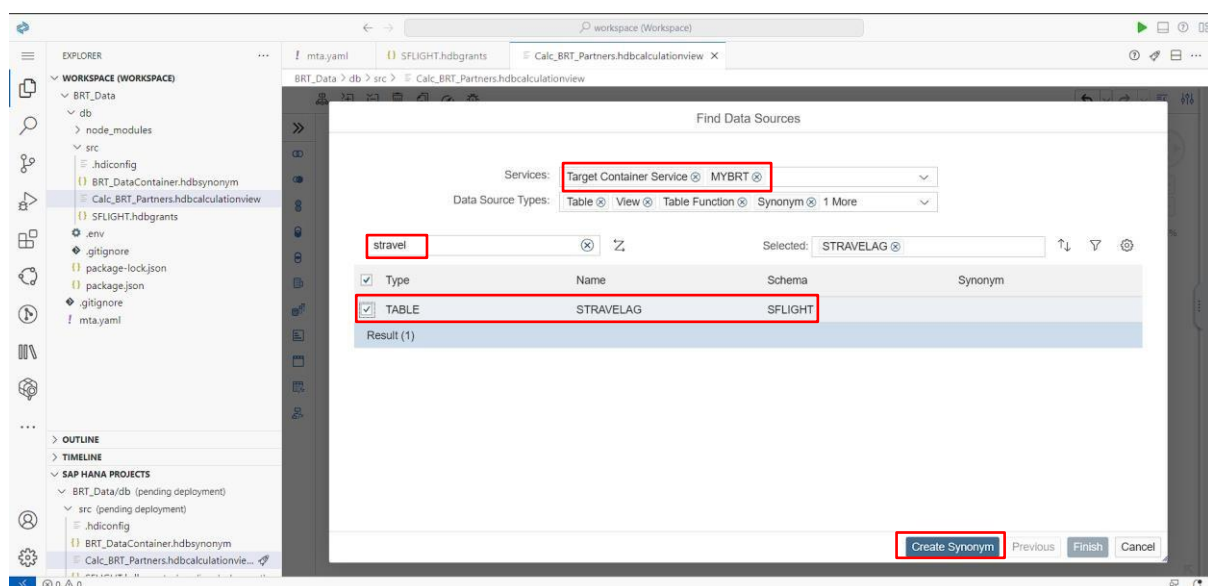
- Create "Join" module, lalu klik ikon "+"



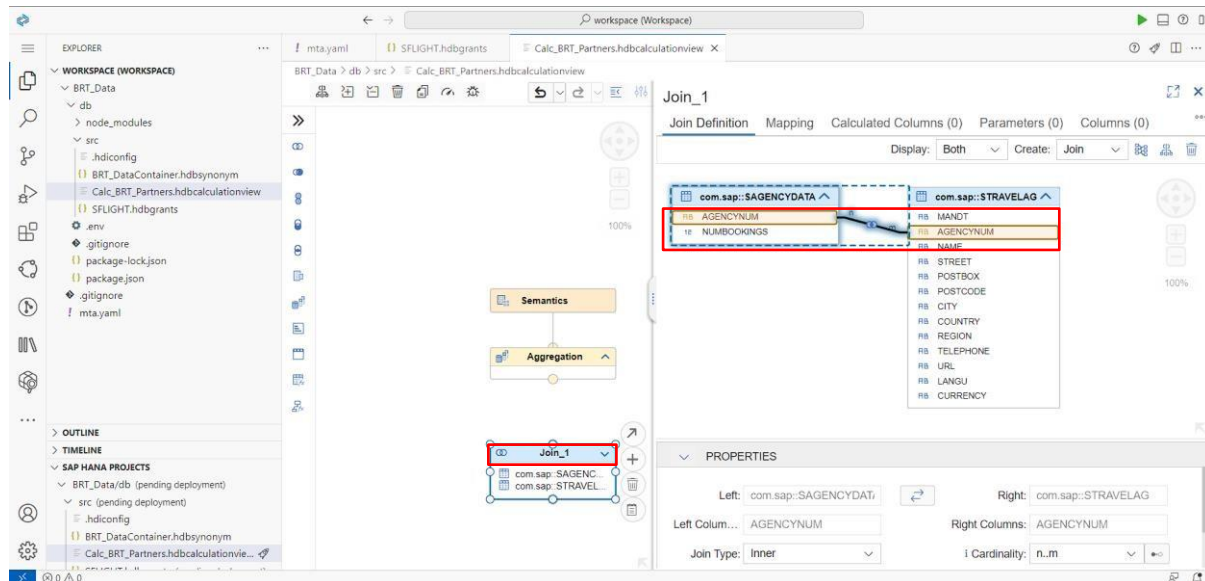
- Create synonym untuk SAGENCYDATA, kemudian klik “Finish”



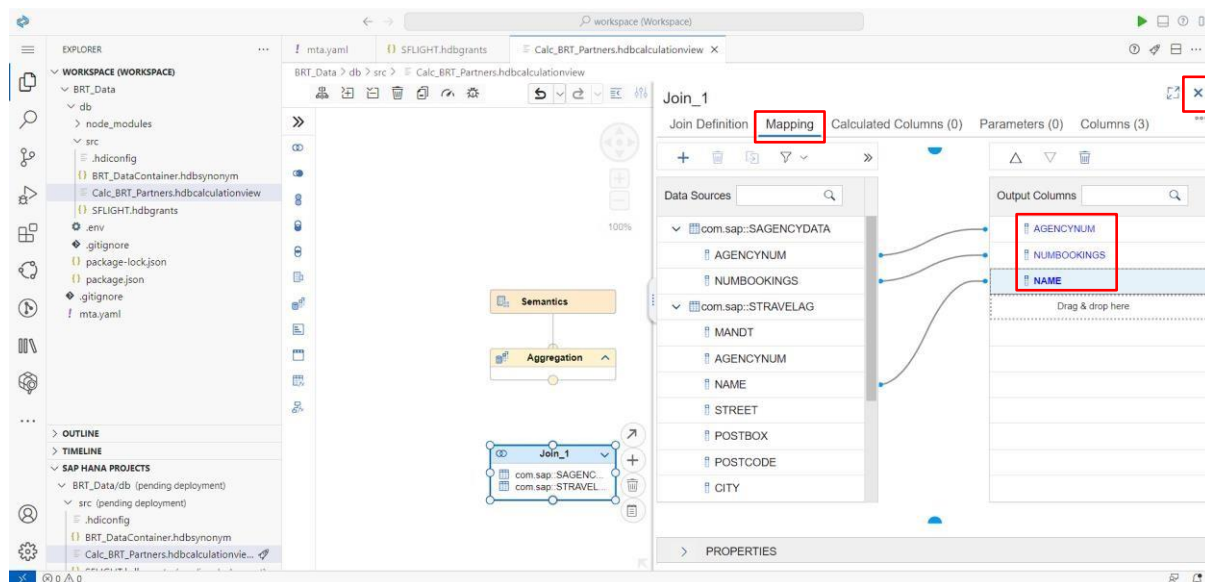
- Create synonym untuk STRAVELAG, kemudian klik “Finish”



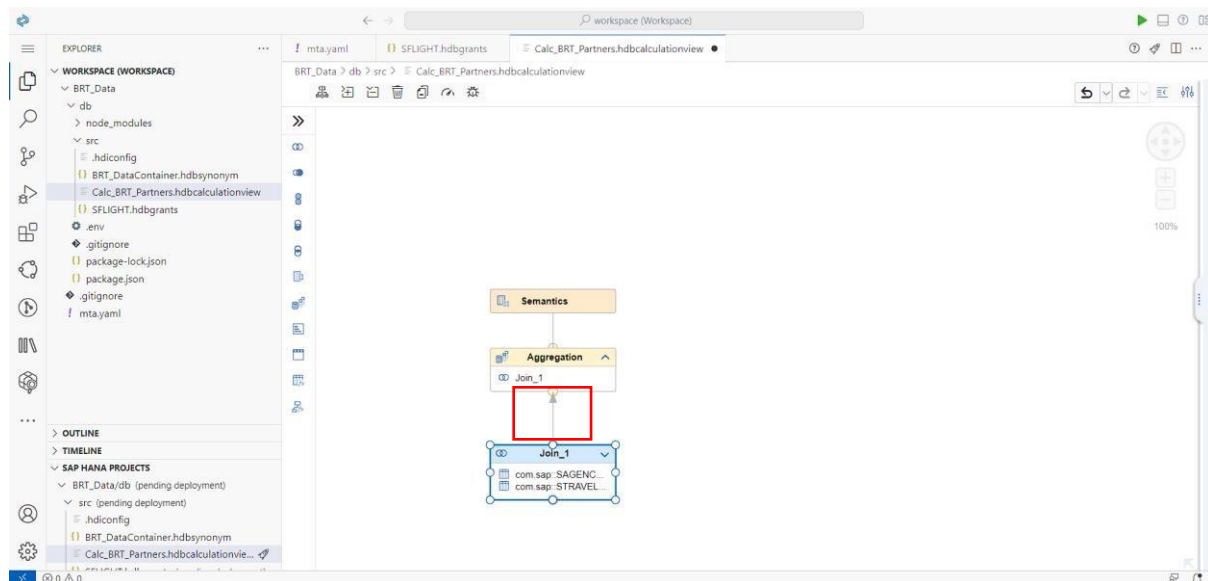
- Klik 2 kali pada “Join\_1”, kemudian klik dan tahan “AGENCYNUM” dari “SAGENCYDATA”, kemudian letakkan ke “AGENCYNUM” of “STRAVELAG”



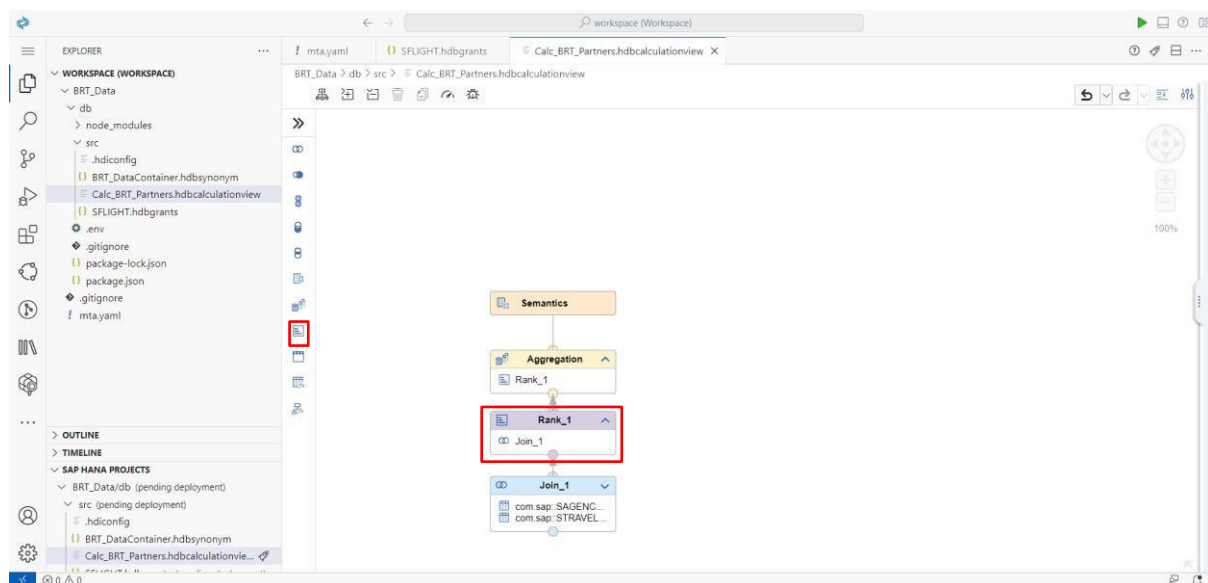
- Klik pada “Mapping”, pilih dan drag “AGENCYNUM”, “NUMBOOKINGS”, dan “NAME” ke sebelah kanan. Setelah itu tutup jendela join



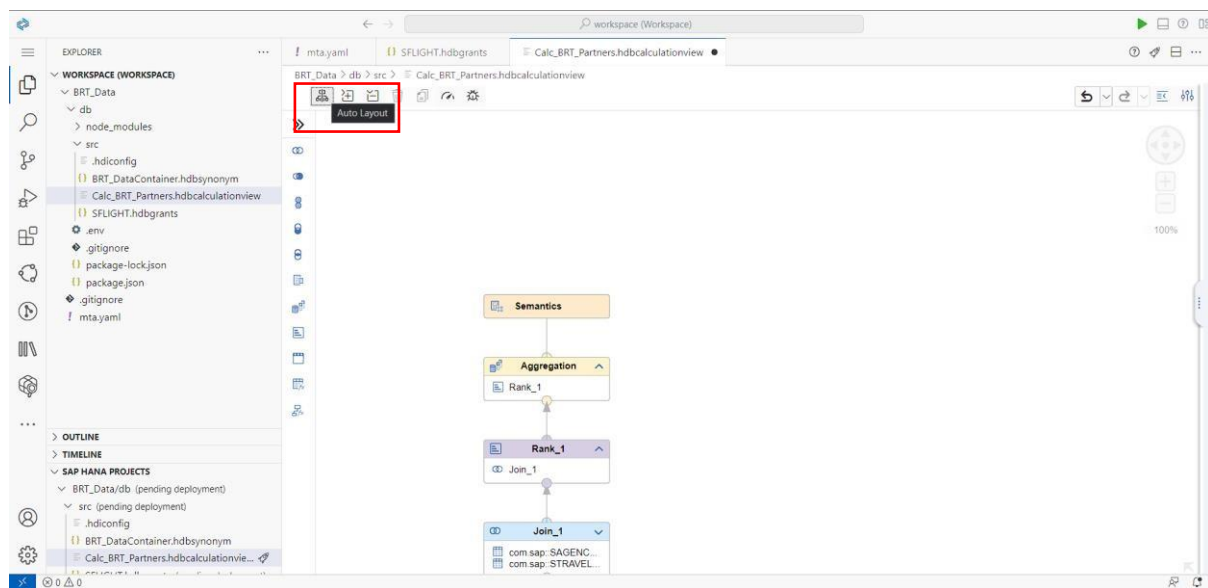
- Connect “Join\_1” ke “Aggregation” menggunakan arrow icon



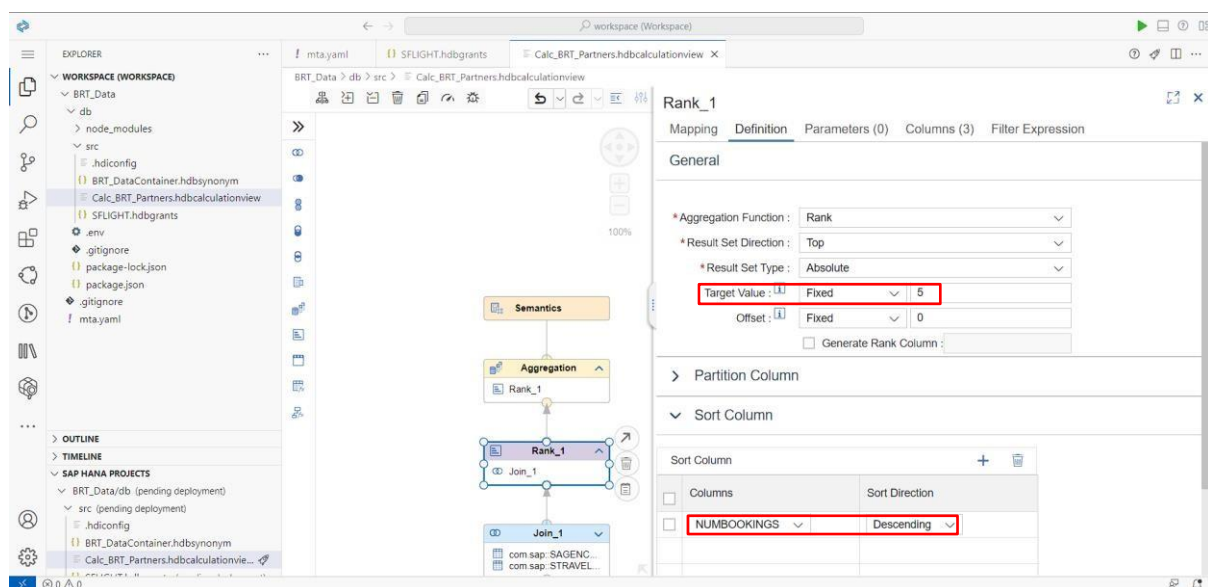
- Tambahkan rank node diantara 2 nodes



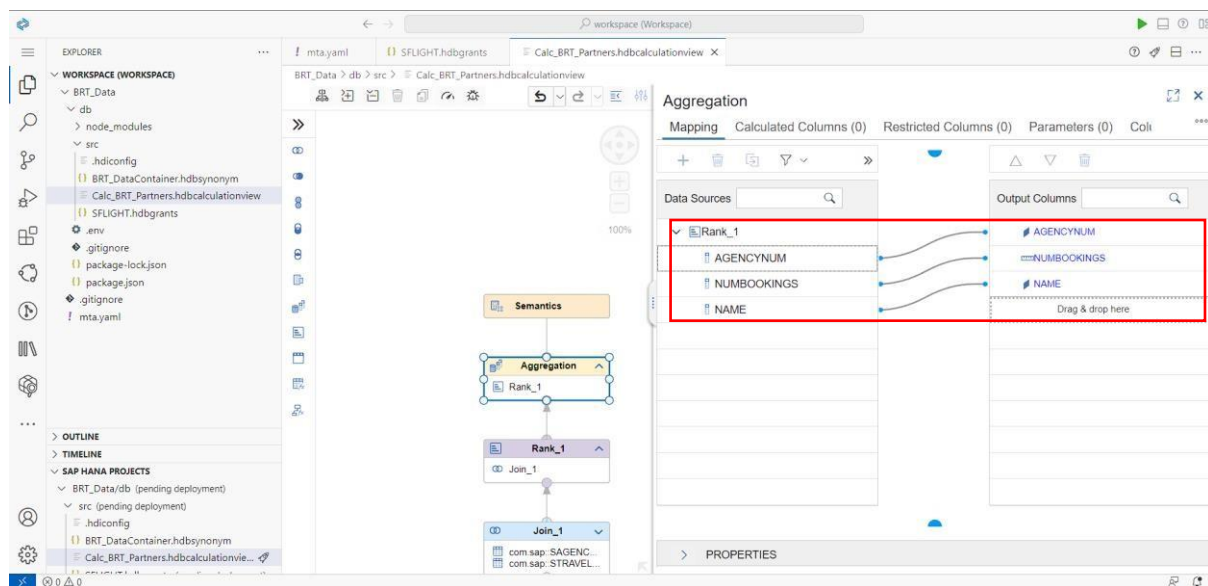
- Klik auto layout untuk mengatur ulang canvas



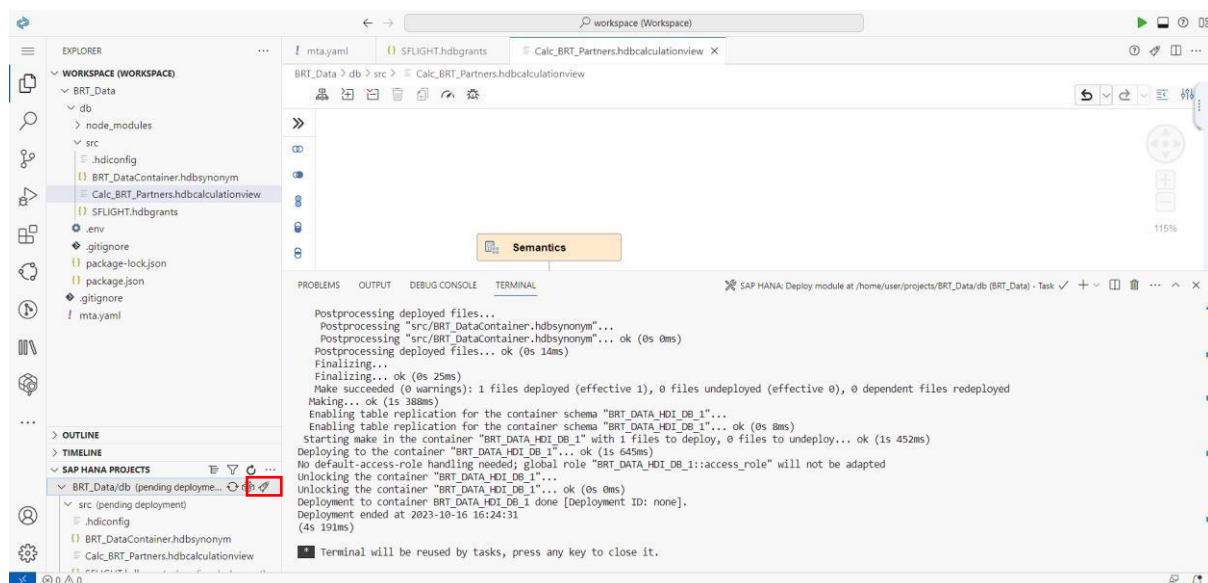
- Atur “Rank\_1” dengan meng-klik 2 kali



- Atur pemetaan “Aggregation” dengan meng-klik 2 kali



- Terapkan projek





- Membuka HDI Container

The screenshot shows the SAP HANA Database Explorer interface. The top panel displays the workspace structure, including the 'BRT\_Data' container and its sub-objects. The 'Terminal' tab shows the deployment process, including the command 'Open HDI container' and the resulting output.

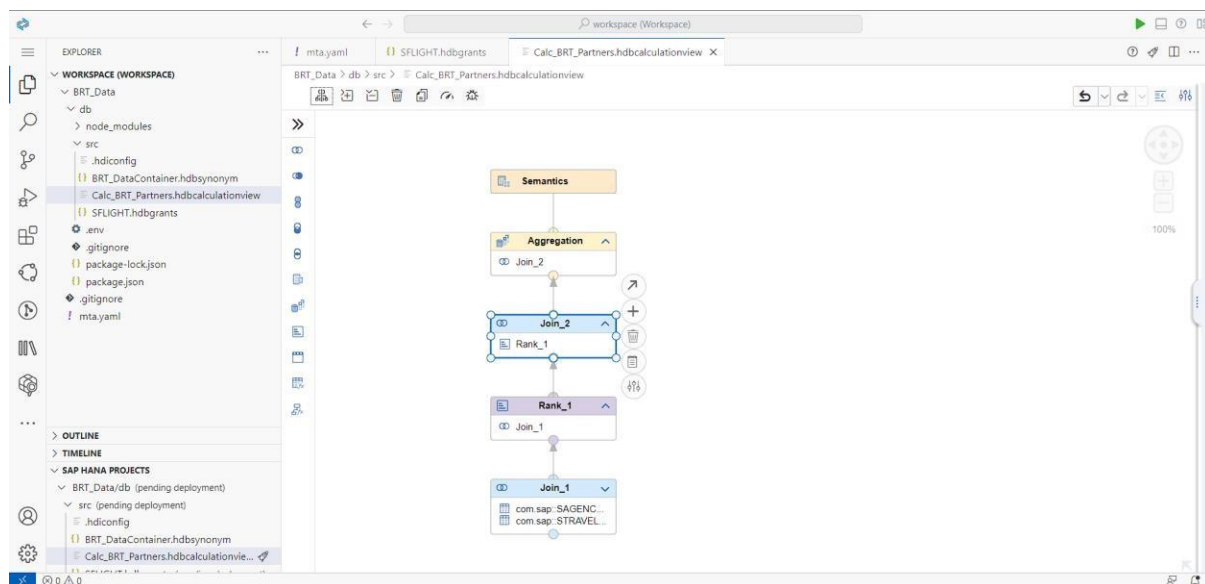
The middle panel shows the 'Column Views' section, where the 'Calc\_BRT\_Partners' view is selected. The view details are displayed, including the schema 'BRT\_DATA\_HDI\_DB\_1' and the type 'CALCULATED'.

The bottom panel shows the 'Raw Data' view of the 'Calc\_BRT\_Partners' view. The data is displayed in a table with 5 rows and 3 columns: AGENCYNUM, NAME, and NUMBOOKINGS.

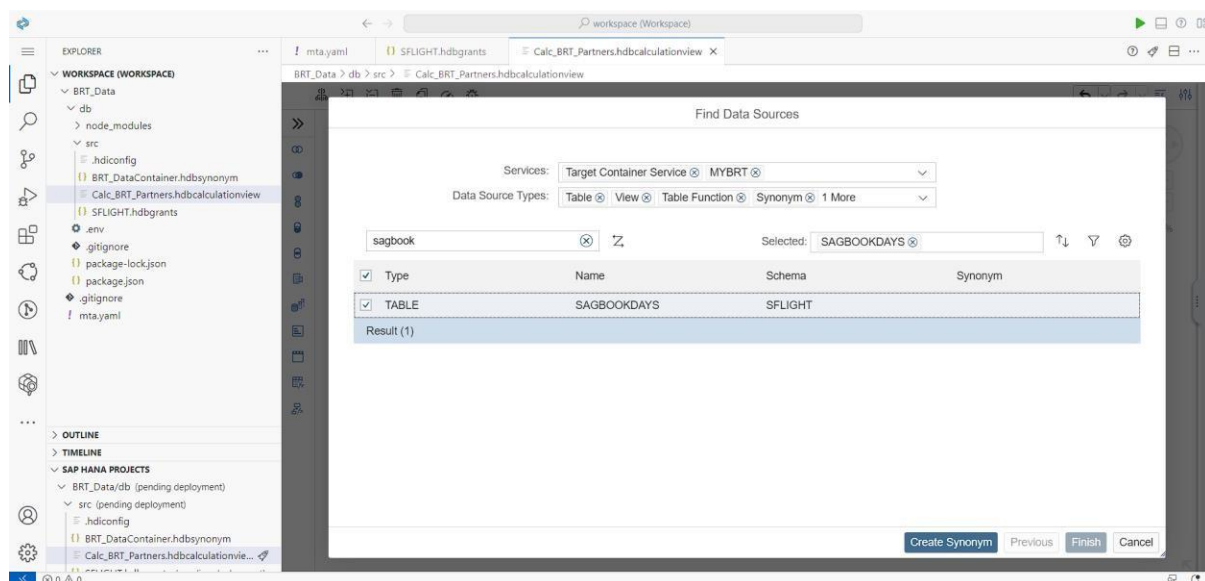
Row	AGENCYNUM	NAME	NUMBOOKINGS
1	00000284	Rainy, Stormy, Cloudy	27870
2	00000122	Fly Low	27869
3	00000101	Bella Italia	27866
4	00000109	Kangeroos	27867
5	00000118	Asia By Plane	27416



- Buat Join Node yang baru



- Tambahkan data source “SAGBOOKDAYS” Ke “Join\_2”



- Mengatur Join Definition and Mapping of both

The image displays two screenshots of the SAP HANA Studio interface, illustrating the configuration of a join definition and its mapping.

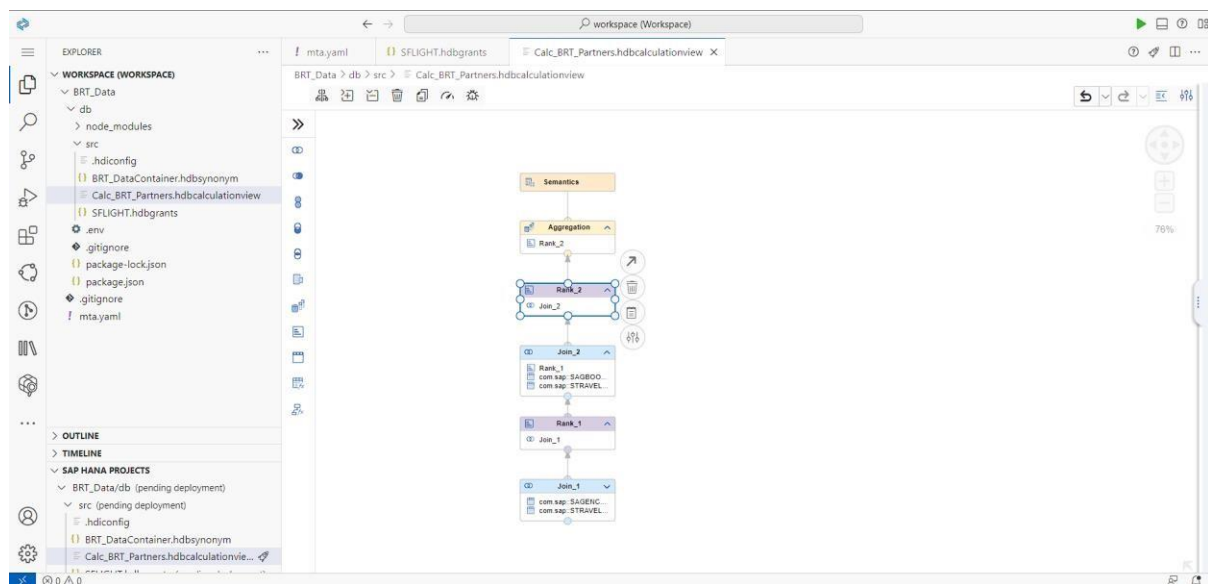
**Top Screenshot: Join Definition**

- The **Join Definition** tab is active for **Join\_2**.
- The **Join Definition** pane shows a diagram with **Rank\_1** and **com.sap::SAGBOOKDAYS** joined by an inner join.
- The **Properties** pane shows:
  - Left:** Rank\_1
  - Right:** com.sap::SAGBOOKDAYS
  - Left Column:** AGENCYNUM
  - Right Column:** AGENCYNUM
  - Join Type:** Inner
  - Cardinality:** n:m

**Bottom Screenshot: Mapping**

- The **Mapping** tab is active for **Join\_2**.
- The **Data Sources** pane lists the columns from **Rank\_1** and **com.sap::SAGBOOKDAYS**.
- The **Output Columns** pane shows the columns being mapped to the final result set.
- The mapping shows:
  - Rank\_1** columns: AGENCYNUM, NUMBOOKINGS, NAME.
  - com.sap::SAGBOOKDAYS** columns: AGENCYNUM, ORDERDAY, DAYCOUNT.
  - Output Columns:** AGENCYNUM, NUMBOOKINGS, NAME, DAYCOUNT, ORDERDAY.

- Add “Rank\_2”



- Set Up “Rank\_2”

**Rank\_2**

Mapping Definition Parameters (0) Columns (5) Filter Expression

**General**

- \*Aggregation Function: Rank
- \*Result Set Direction: Top
- \*Result Set Type: Absolute
- Target Value: Fixed 1
- Offset: Fixed 0
- ☐ Generate Rank Column

**Partition Column**

Logical Partition + -

Columns
AGENCYNUM

**Rank\_2**

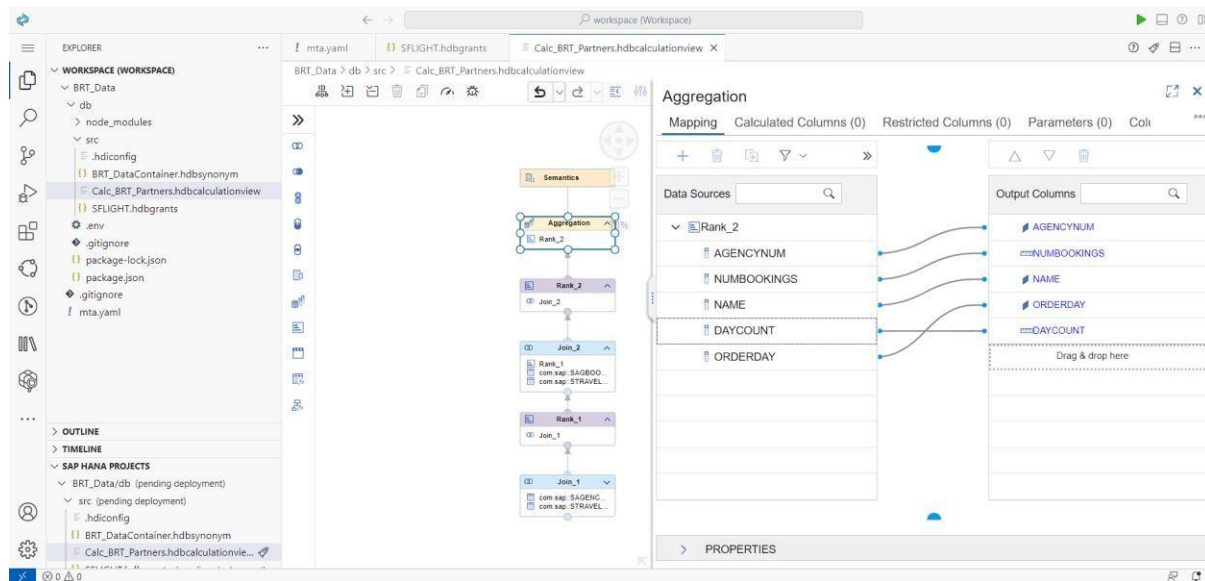
Mapping Definition Parameters (0) Columns (5) Filter Expression

**Sort Column**

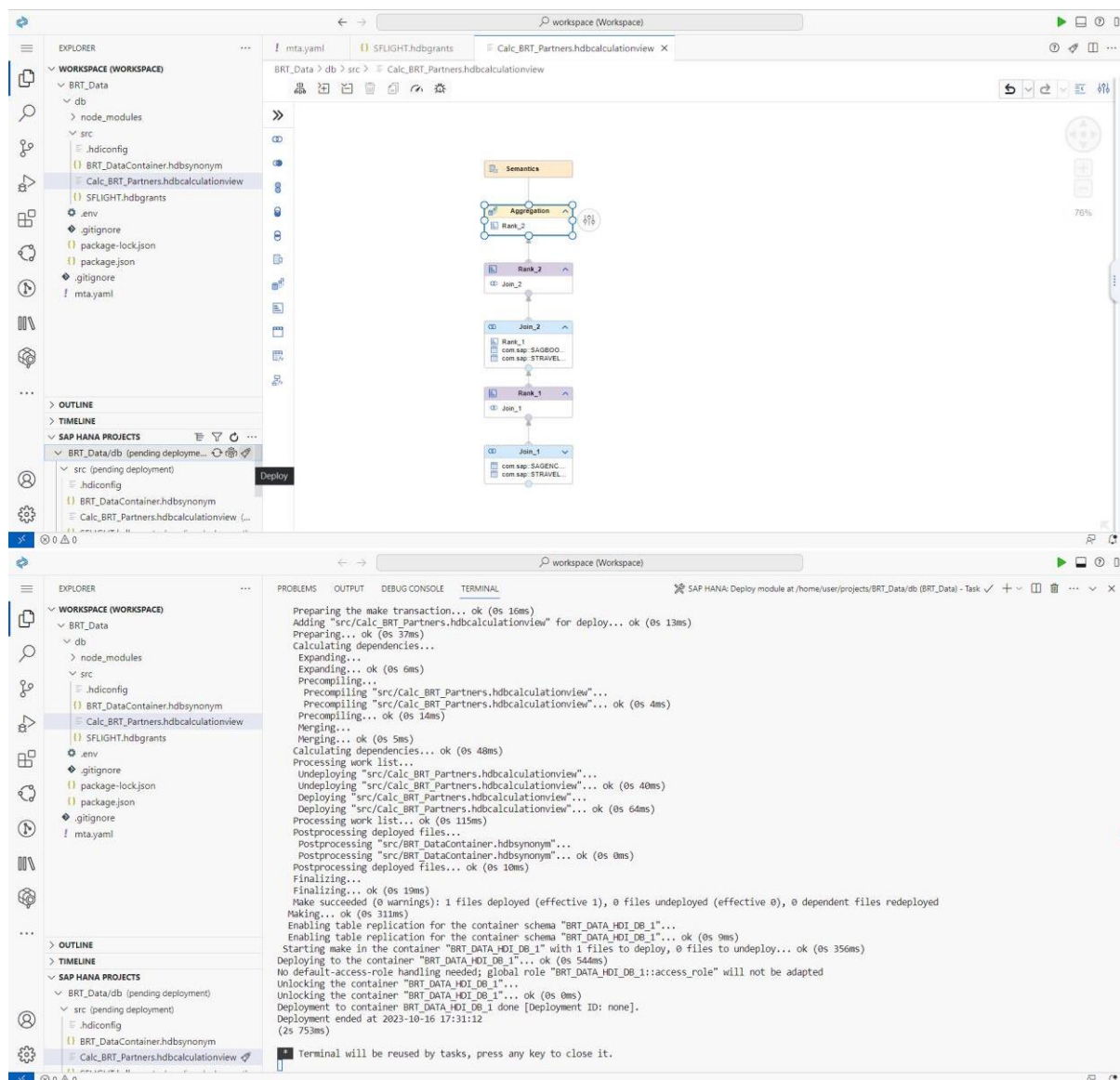
Sort Column + -

Columns	Sort Direction
DAYCOUNT	Descending

- Ubah Aggregation mapping



- Pindahkan project



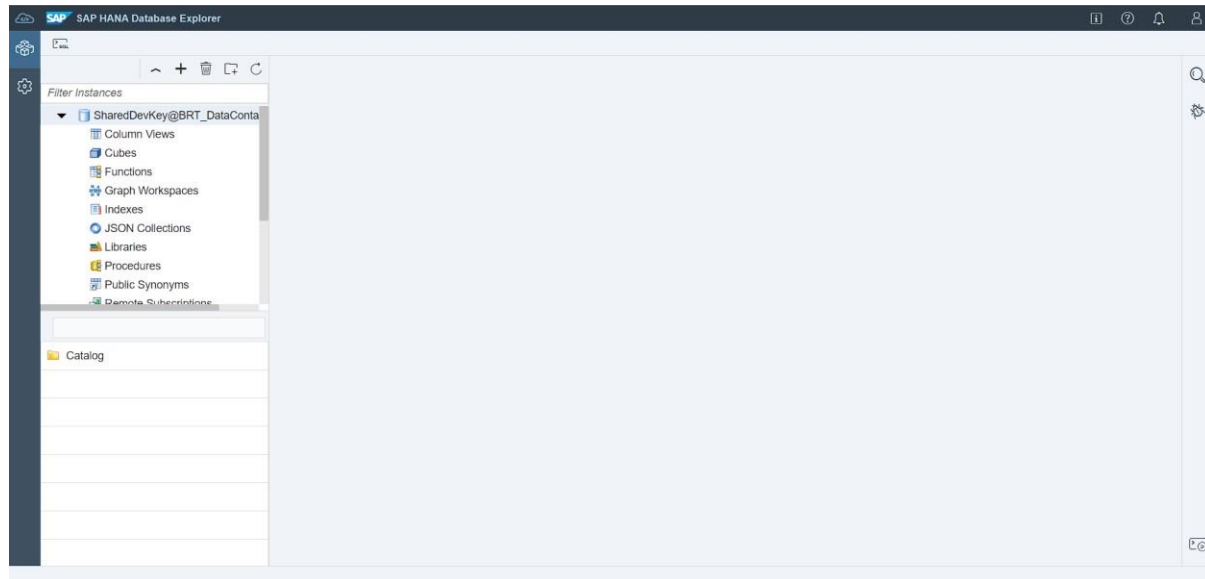
- Periksa output dengan HDI Container

The screenshot displays the SAP HANA Database Explorer interface. The top pane shows a workspace with several HDI containers, including 'BRT\_Data', 'Calc\_BRT\_Partners.hdbcalculationview', and 'SFLIGHT.hdbgrants'. A tooltip 'Open HDI container' is visible over the 'Calc\_BRT\_Partners.hdbcalculationview' container. The bottom pane shows the 'Calc\_BRT\_Partners' table view, displaying a list of flight bookings with columns: AGENCYNUM, NAME, ORDERDAY, NUMBOOKINGS, and DAYCOUNT. The table contains 5 rows of data.

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	Kangerroos	THURSDAY	27867	4095

## 8. Share a Subset of Your Data Securely

- Buka SAP HANA Database Explorer

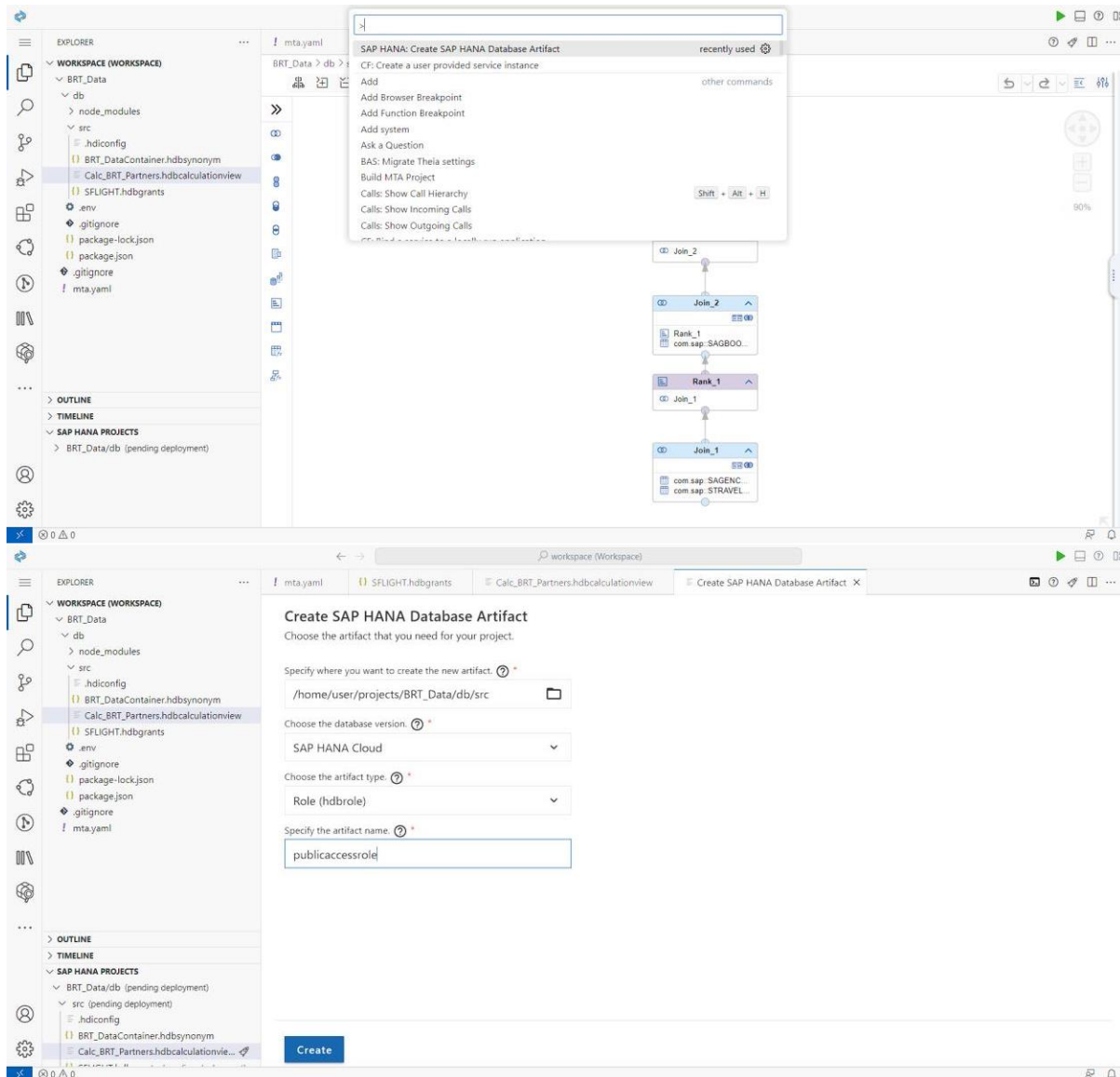


- Hasilkan pernyataan SELECT

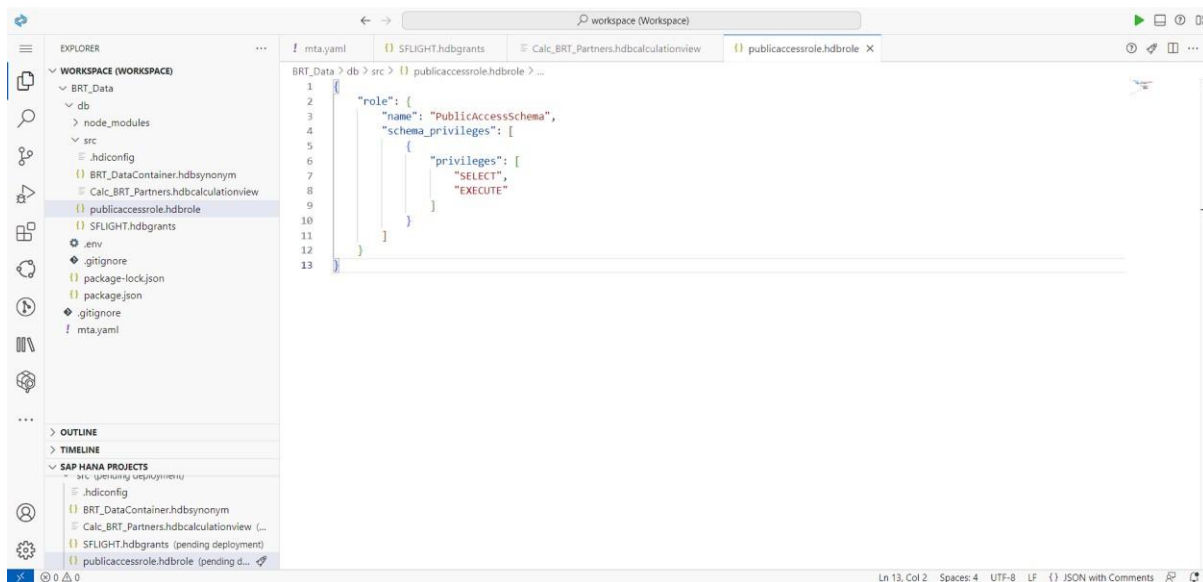




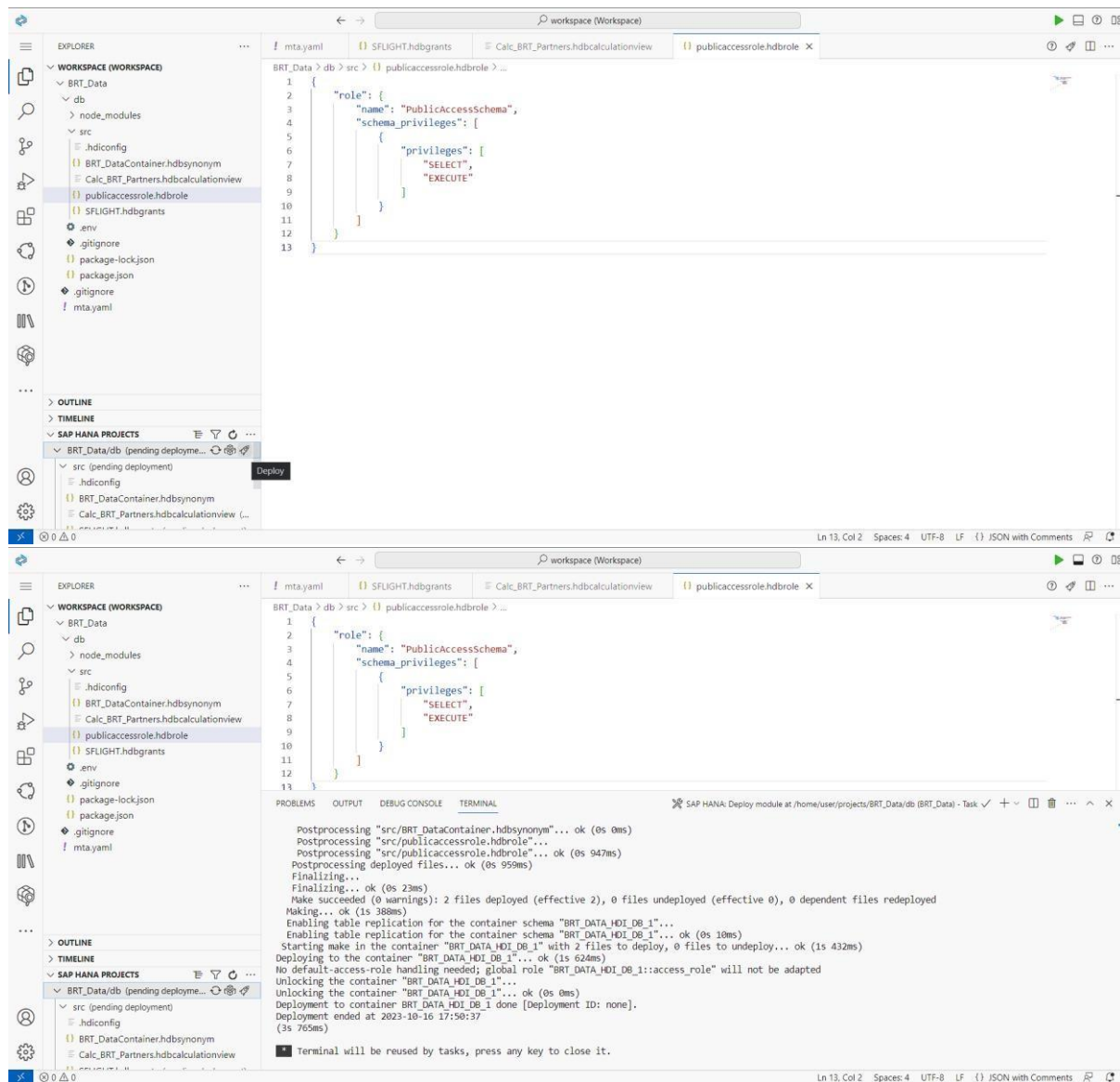
- Membuat SAP HANA Database Artifact



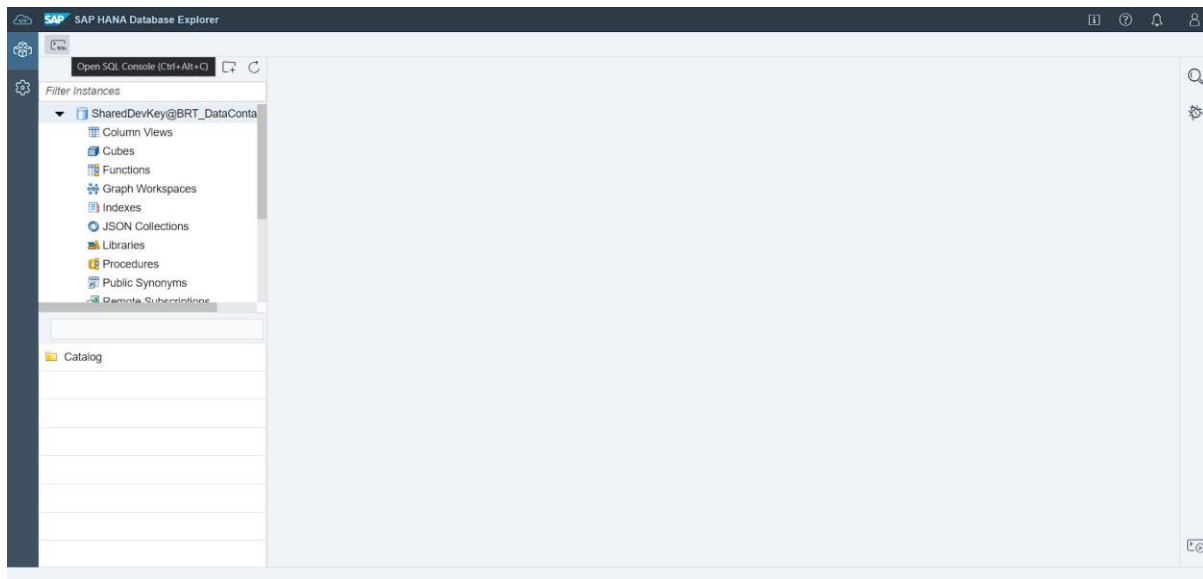
- Mengatur public access role



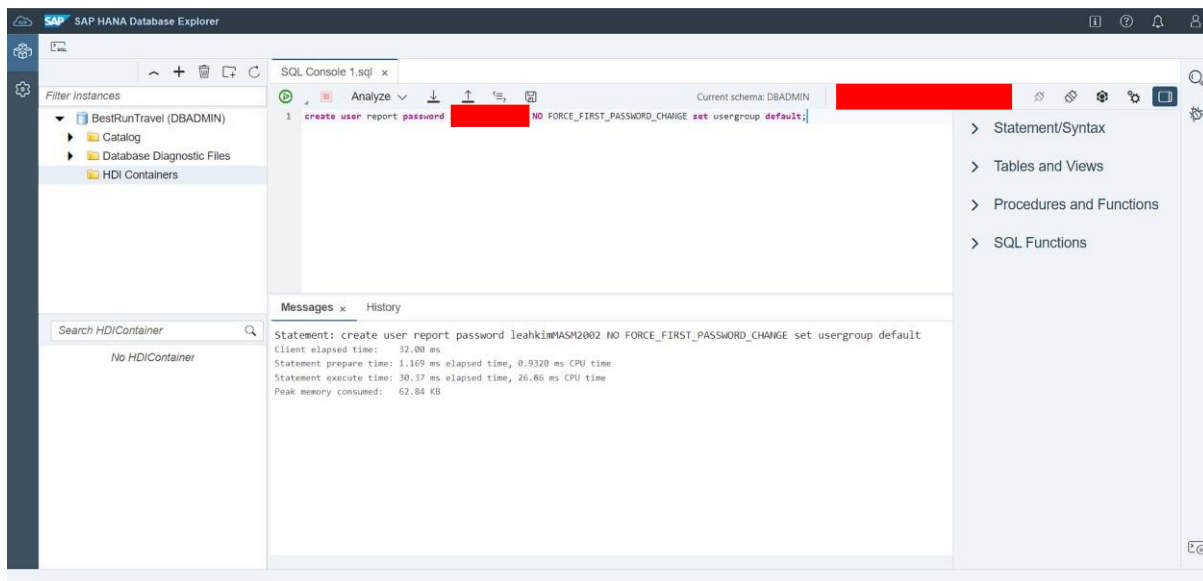
- Pindahkan project



- Buka SAP HANA Database Explorer dengan HDI Container dan buka console SQL baru.



- Buat pengguna baru, kemudian salin query, isi dengan kata sandi akun, lalu jalankan 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

Analyze

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

Analyze

Current schema: REPORT

```
1- CONNECT report PASSWORD
```

Messages x History

Statement: CONNECT report PASSWORD

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

Analyze

Current schema: REPORT

```
1- SELECT TOP 1000
2   "AGENCYNUM",
3   "NAME",
4   "ORDERDAY",
5   SUP("NUMBOOKINGS") AS "NUMBOOKINGS",
6   SUP("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	Kangerroos	THURSDAY	27867	4095

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