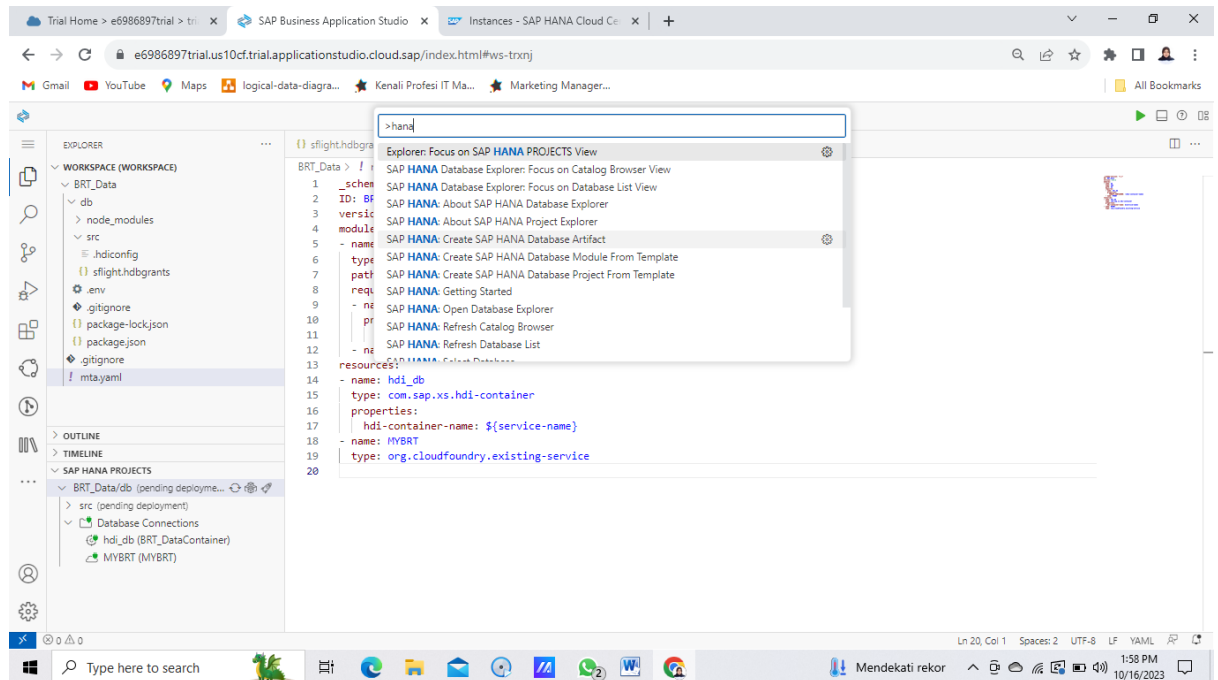


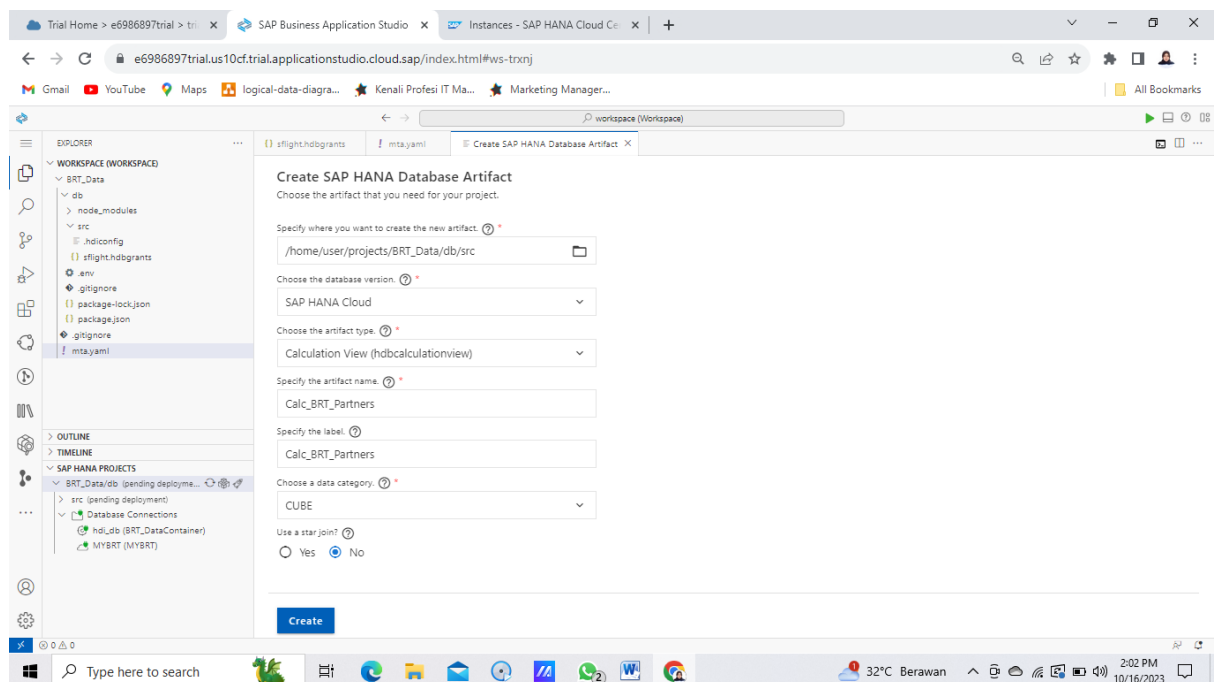
Nama : Felix Kurnia Salim
NIM : 201402121
Kom A

Modul 7: Create Calculation View

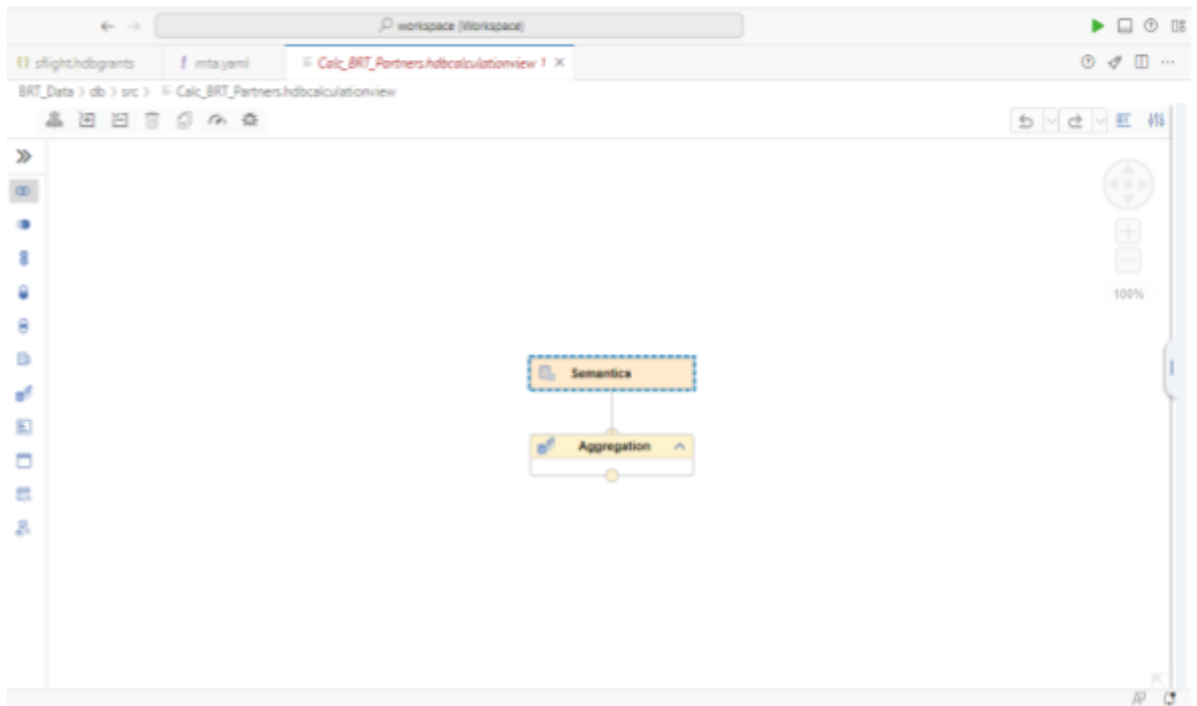
1. Pada SAP Business Application Studio, buka command lalu pilih SAP HANA Create SAP HANA Database Artifact



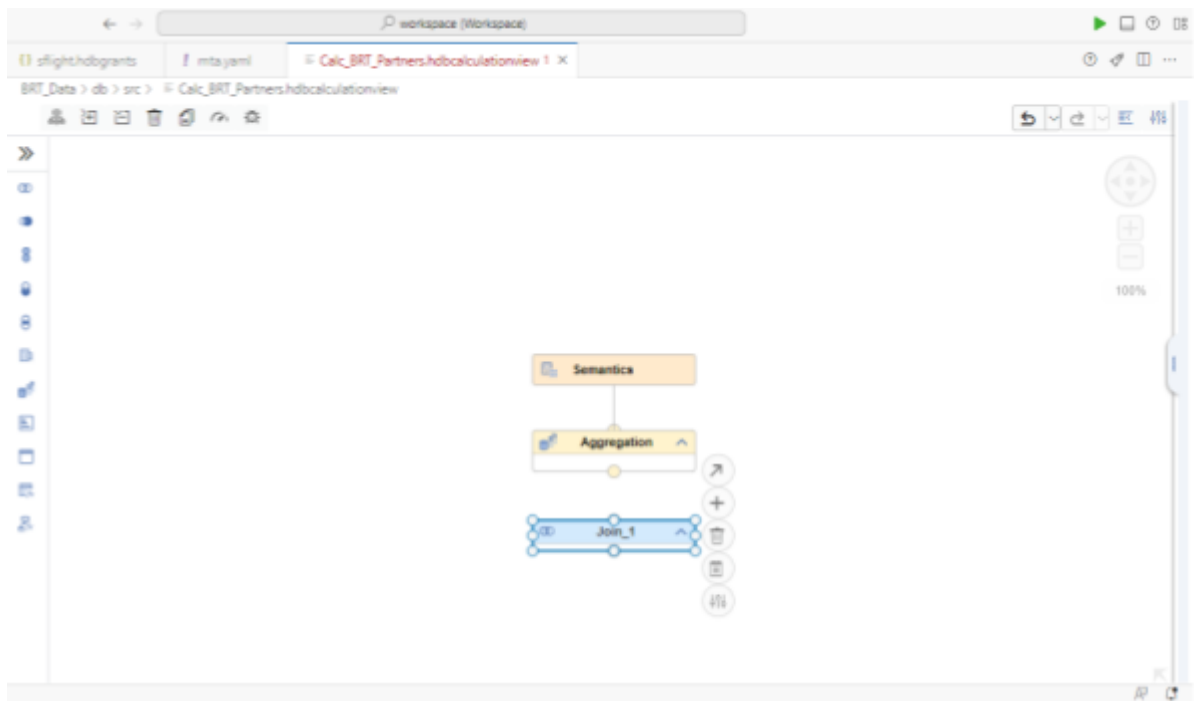
2. Pada halaman Create Artifact, isi tipe artifact, nama artifact, dan location tempat file artifact tersebut. Contoh seperti gambar dibawah ini. Klik Create untuk membuat artifact.



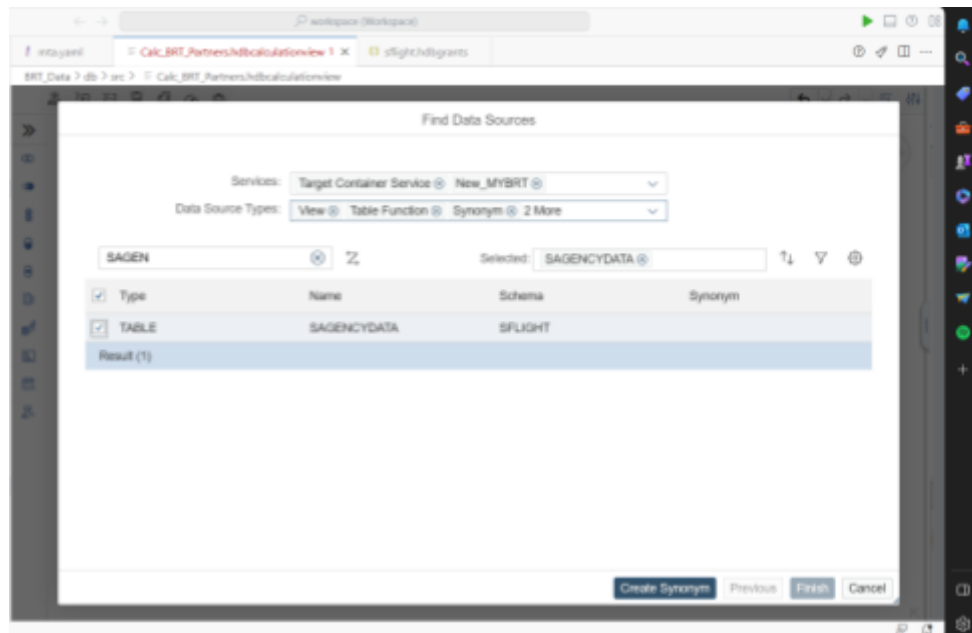
3. Setelah artifact dibuat, artifact akan berbentuk seperti ini



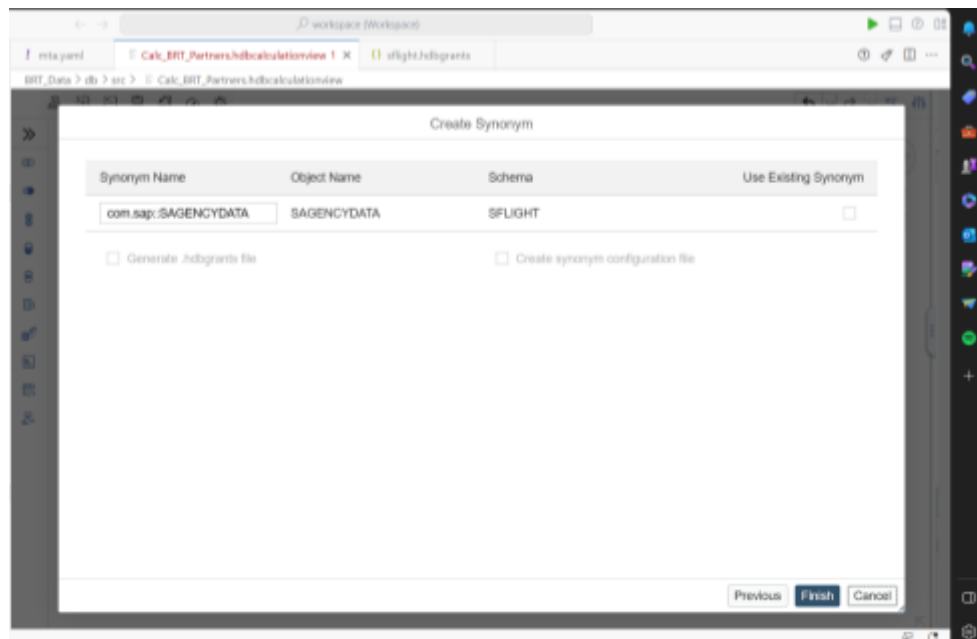
4. Menambahkan segment join lalu klik tambah untuk menambahkan tabel yang akan dilakukan join



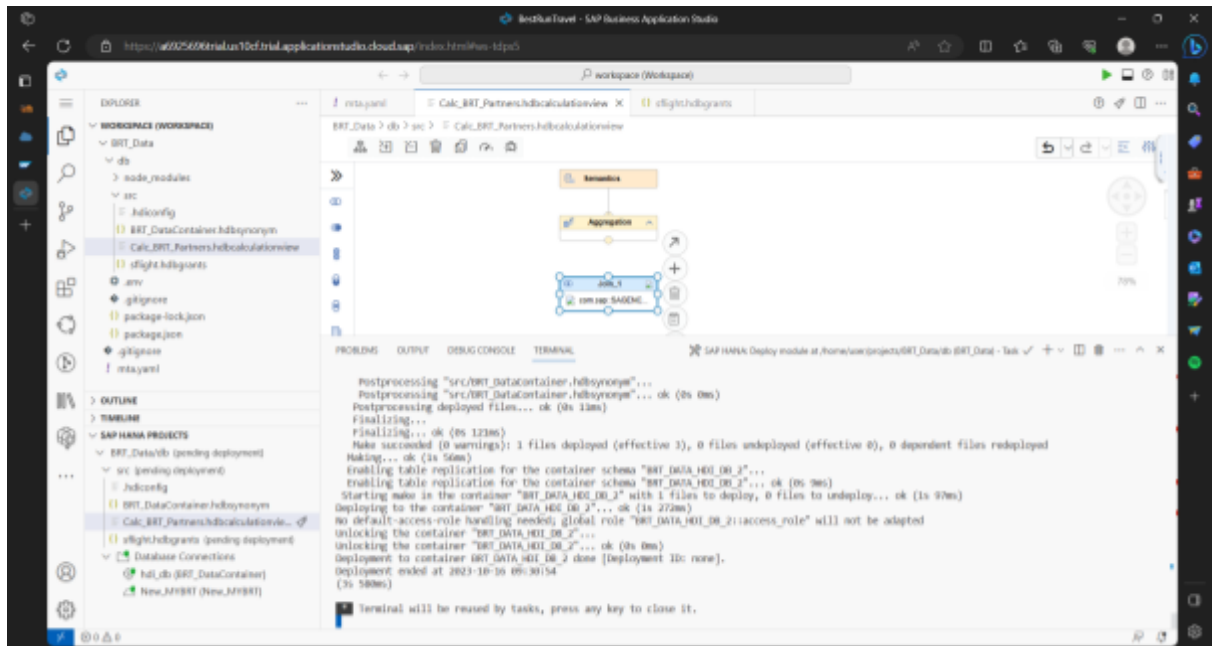
5. Tambahkan service MYBRT yang telah dibuat pada modul sebelumnya, kemudian searching tabel SAGENCYDATA lalu ceklis dan klik Create Sinonim



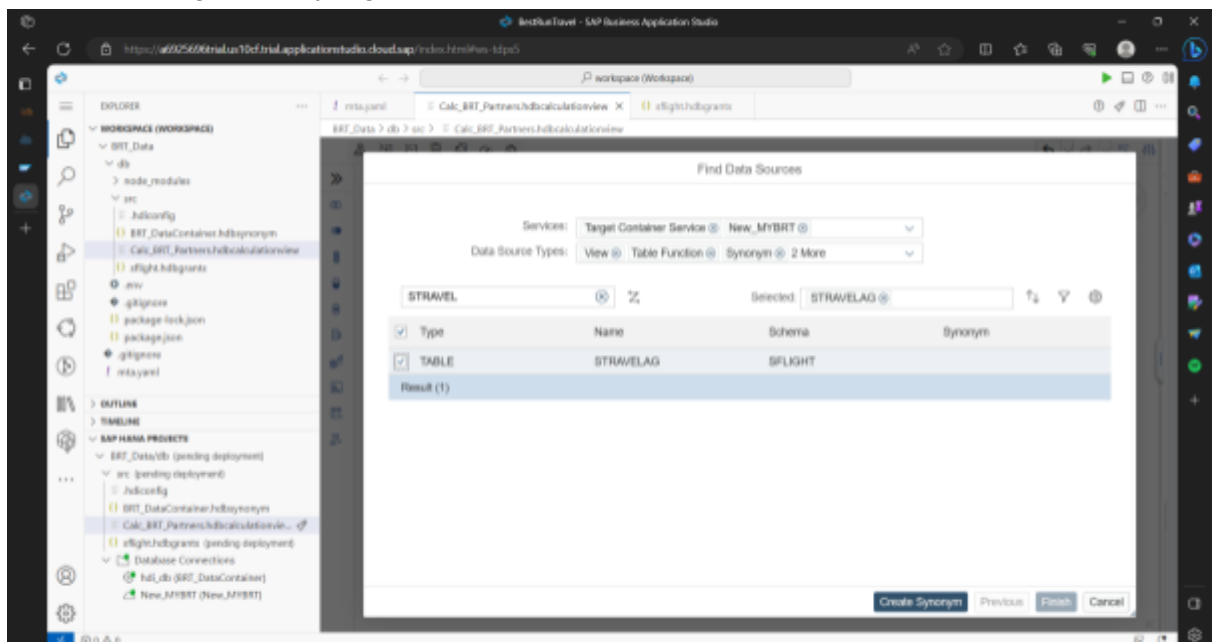
Kemudian klik finish untuk menambahkan

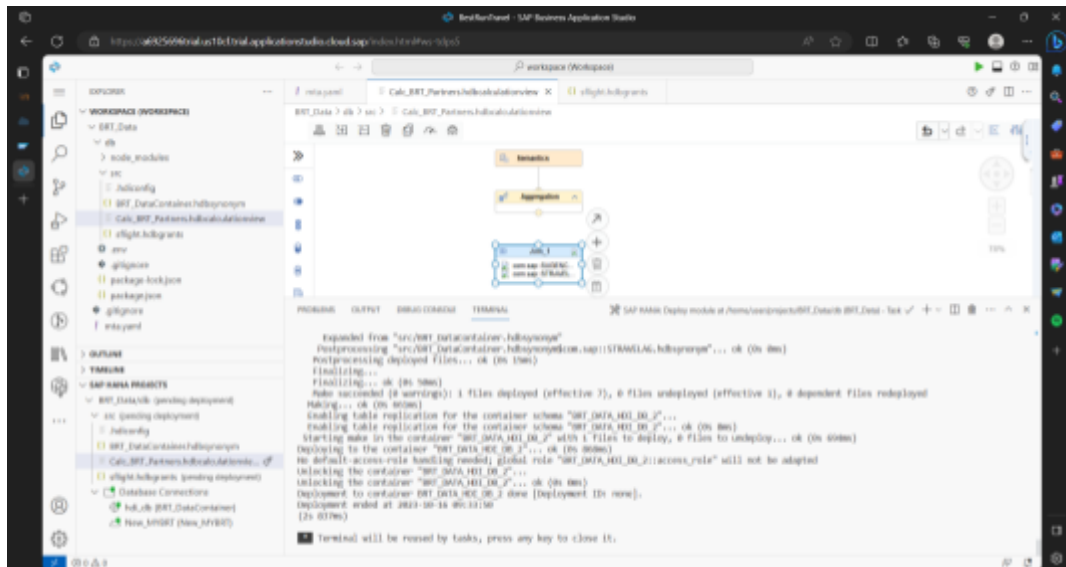


Setelah ditambahkan akan seperti ini

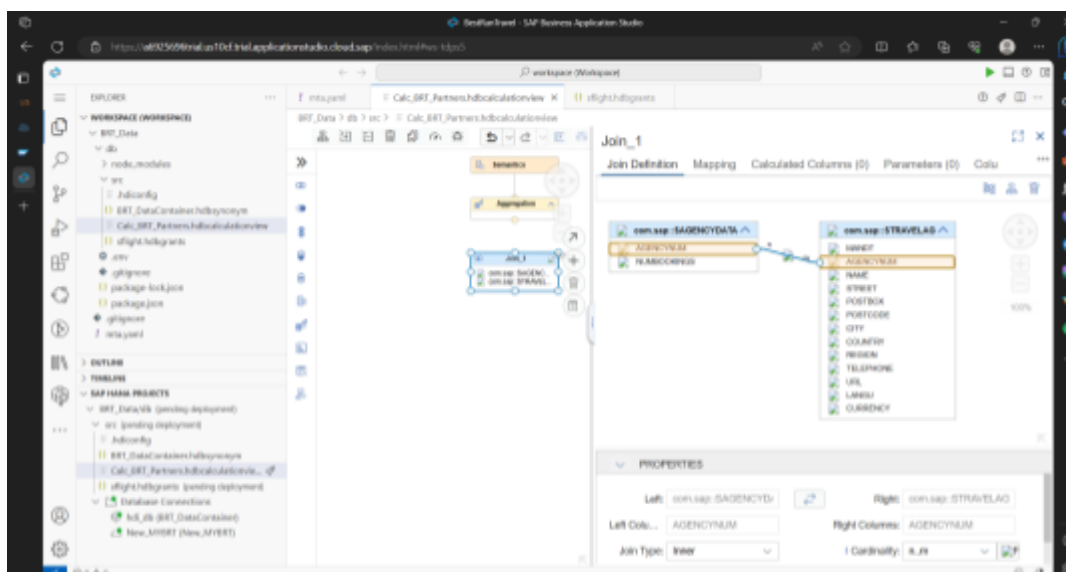
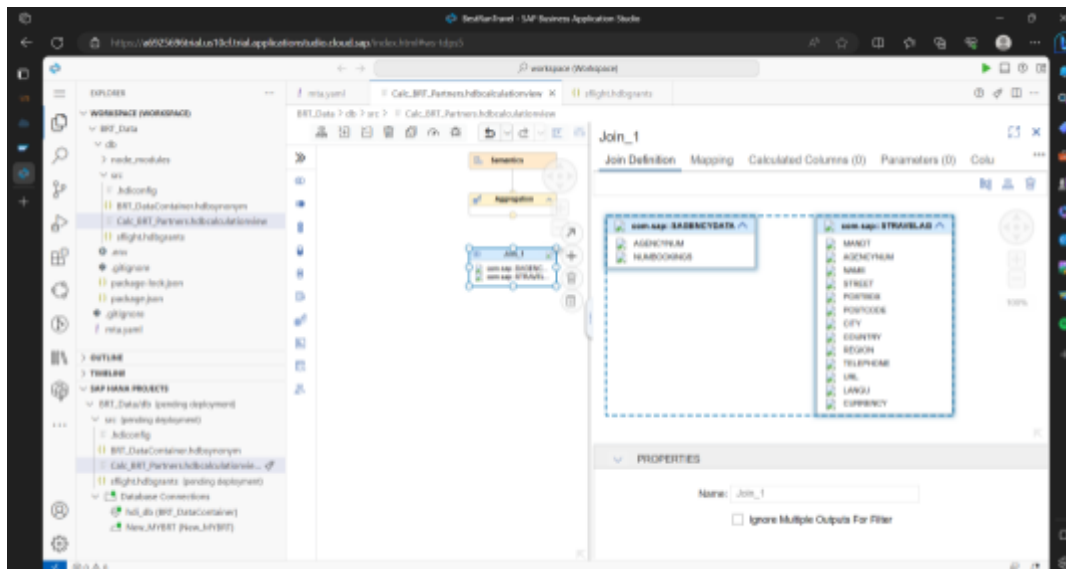


6. Kemudian dengan cara yang sama menambahkan tabel STRAVELAG

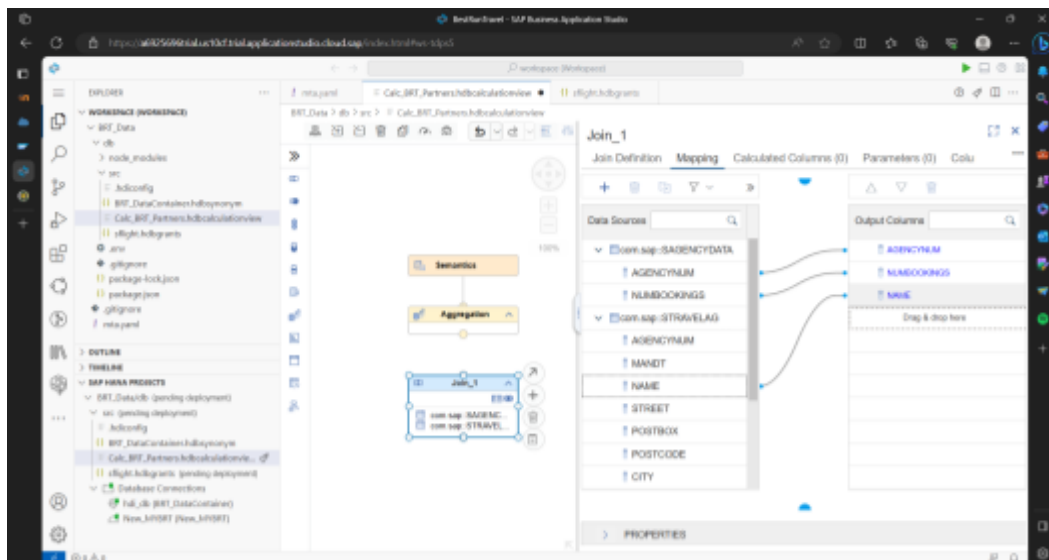
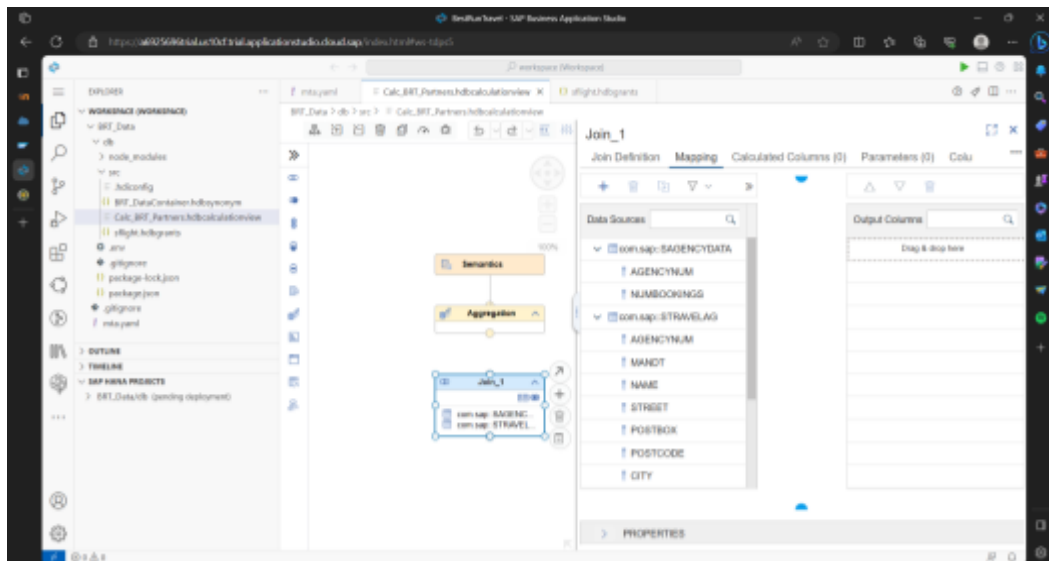




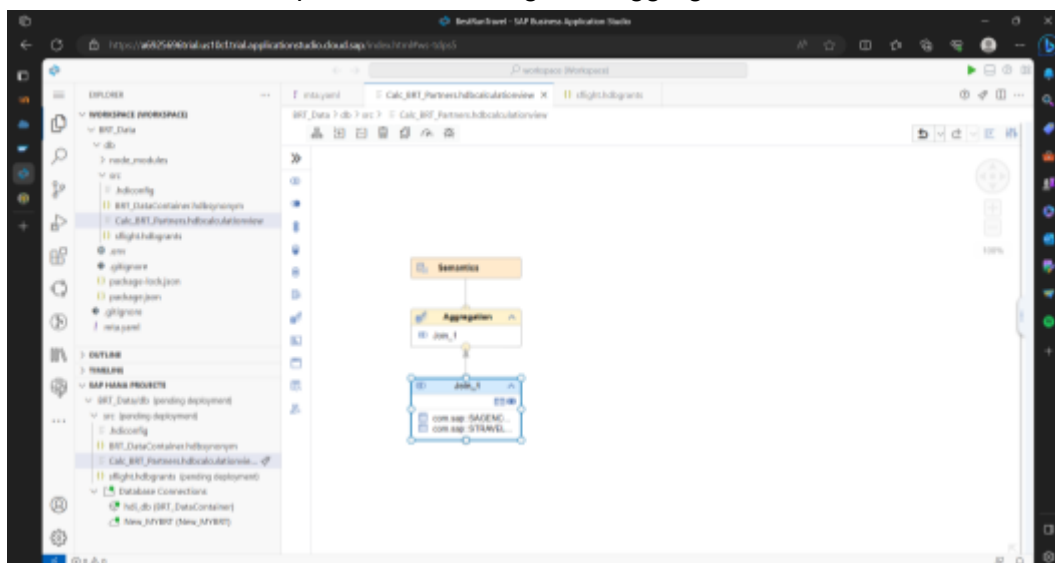
- Double klik join tersebut kemudian hubungkan data AGENCYNUM dari tabel SAGENCYDATA dan STRAVELAG



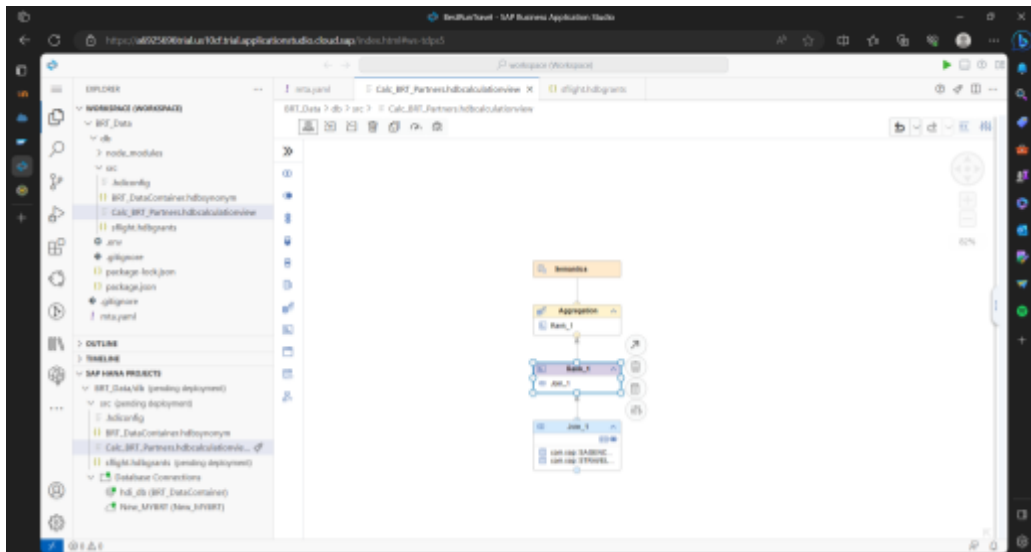
8. Pada bagian mapping, tambahkan data AGENCYNUM, NUMBOOKINGS, dan NAME ke dalam output



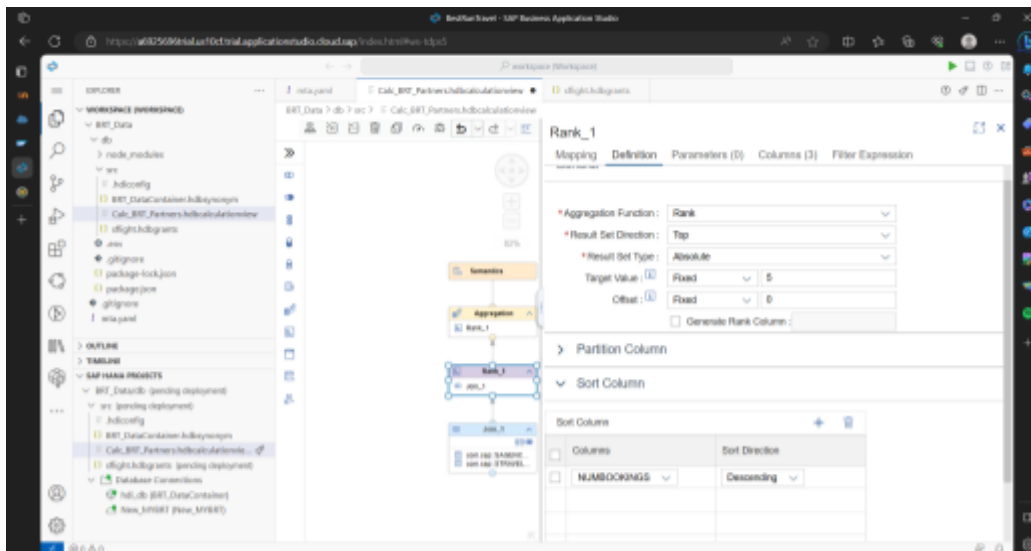
9. Kemudian tambahkan panah ke arah segment aggregation



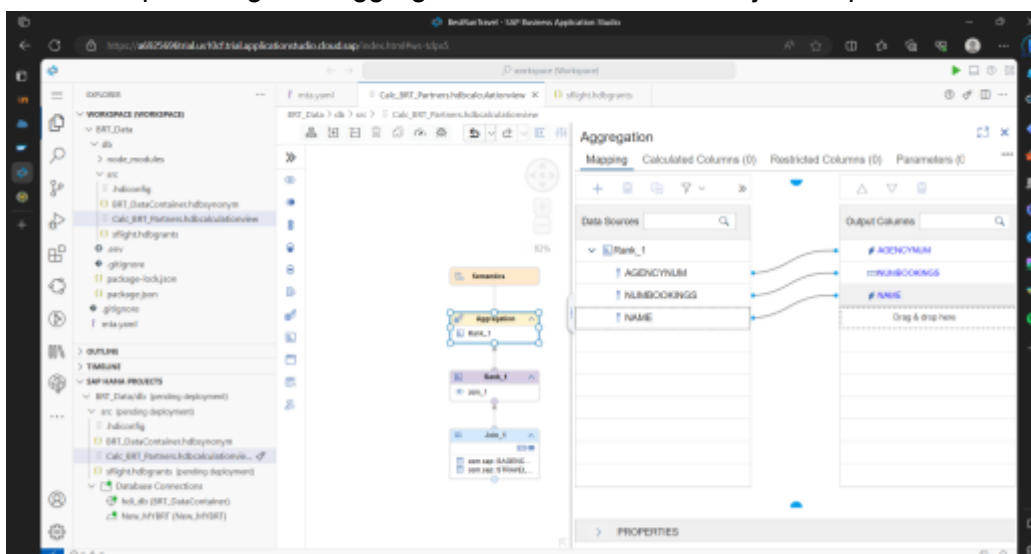
10. Kemudian tambahkan rank diantara tabel join dan aggregation



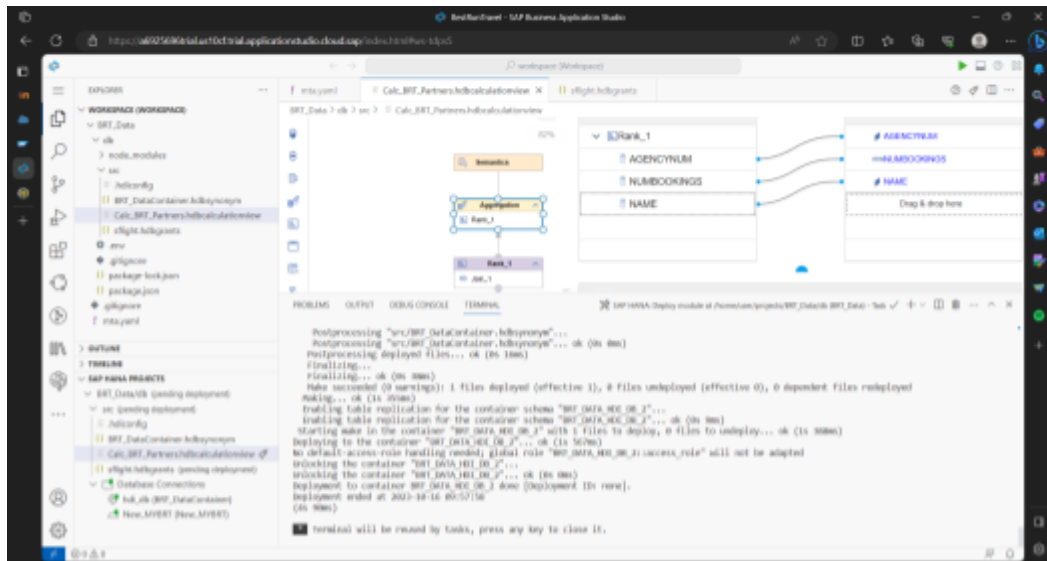
buka rank kemudian pada bagian definition isi target value menjadi 5 dan tambahkan sort column NUMBOOKINGS menjadi descending



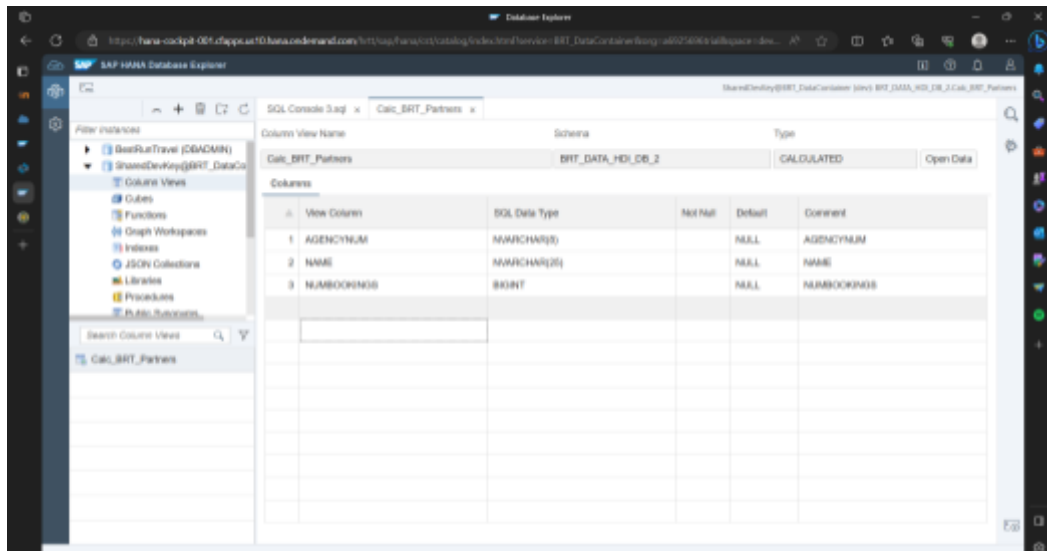
Kemudian pada segment aggregation isi semua data menjadi output



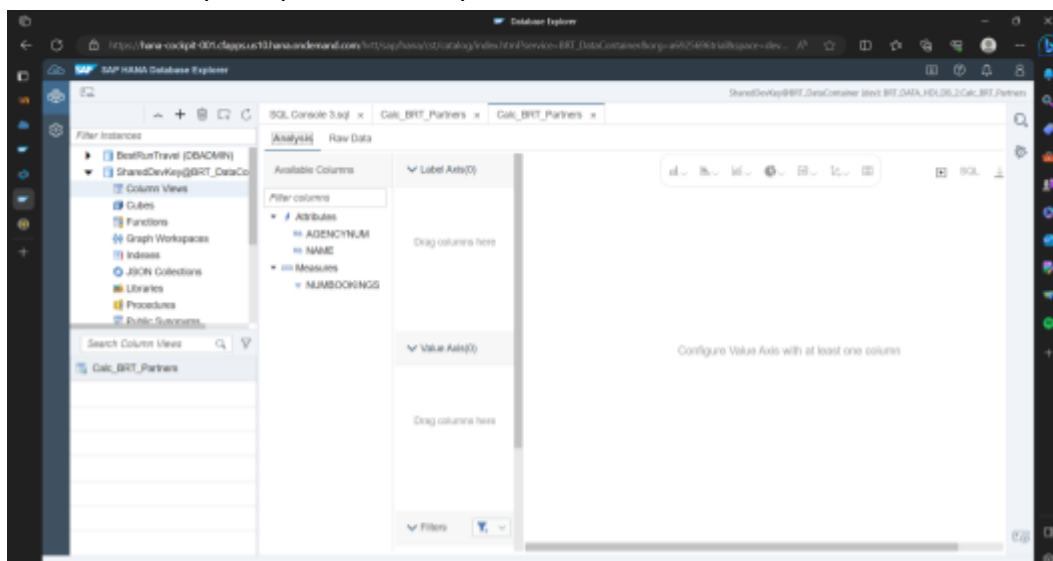
11. Kemudian, setelah itu lakukan deployment



12. Setelah itu pilih HDI Container untuk melihat data. Pilih column view dan oilih Calc_BRT_Partners.



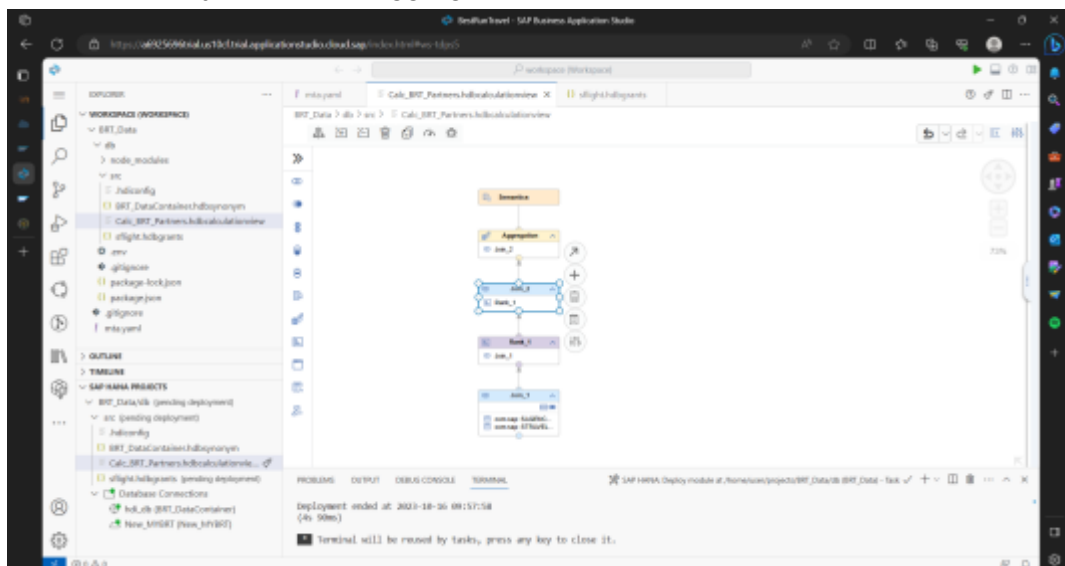
Klik kanan dan pilih open data dan pilih raw data untuk melihat data tersebut



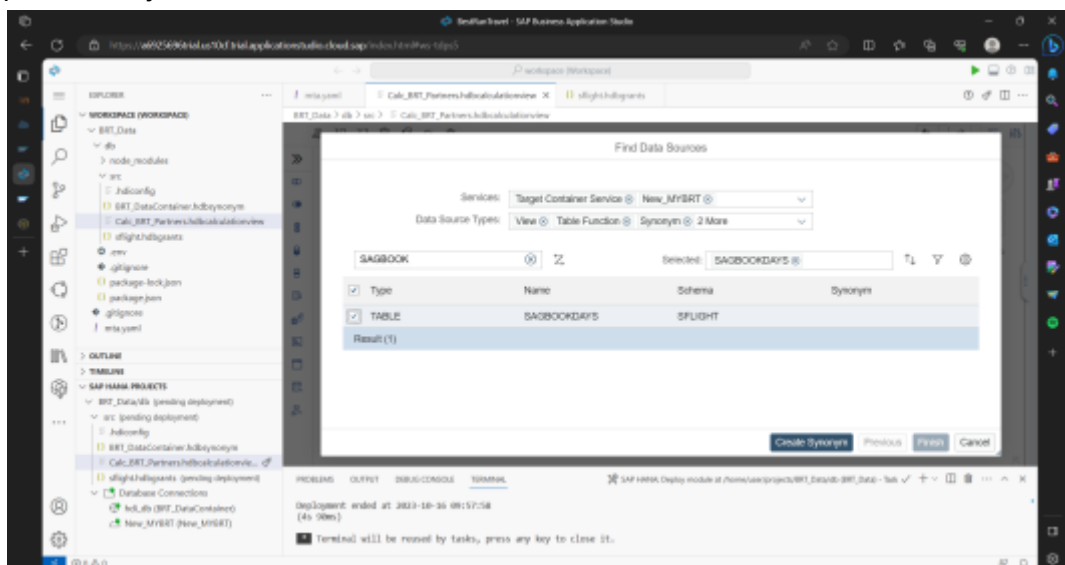
The screenshot shows the SAP HANA Database Explorer interface. The left sidebar displays a tree view of the database structure, including 'BRT_Data' and 'Calc_BRT_Partners'. The main pane shows a table with the following data:

AGENCYNUM	NAME	NUMBOOKINGS
00000084	Rainy, Stormy, Cloudy	27670
00000122	Fly Low	27669
00000101	Beta Italia	27666
00000109	Rangeros	27667
00000118	Asia By Plane	27416

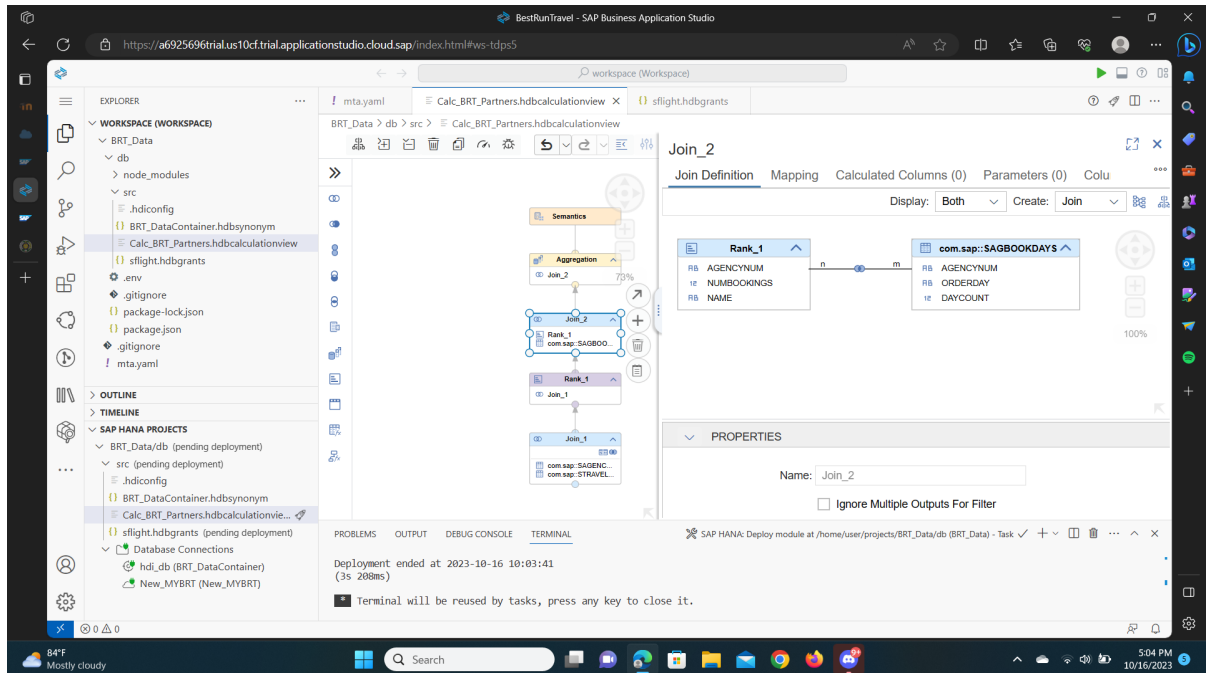
13. Menambahkan join diantara aggregation dan rank



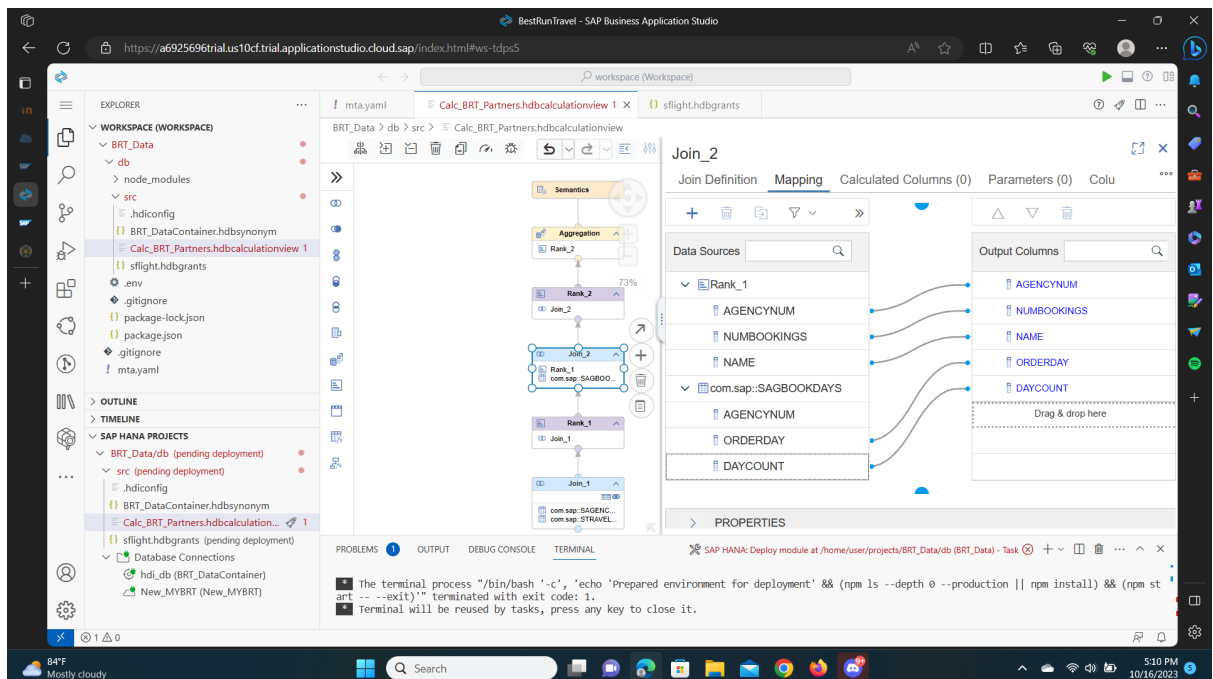
pada tabel join ditambahkan tabel SAGBOOKDAYS



14. Kemudian pada join_2 hubungkan AGENCYNUM pada rank dan tabel SAGBOOKDAYS



Pada bagian mapping, tambahkan data ORDERDAY dan DAYCOUNT sebagai output



15. Kemudian tambahkan rank 2 diantara join 2 dan aggregation

The screenshot shows the SAP Business Application Studio interface. The Explorer pane on the left displays the project structure, including the 'BRT_Data' folder and the 'Calc_BRT_Partners.hdbcalculationview' file. The main editor shows the calculation view diagram with nodes for 'Rank_1', 'Rank_2', and 'Aggregation'. The 'Rank_2' node is selected, and its properties are displayed in the right-hand pane. The 'Columns' tab is active, showing a table with the following data:

N...	Type	Name	Mapping	Data Type	Semantics	K...
		AGENCYCYN	Join_2...	NVARC...		
		NUMBOOKINGS	Join_2...	BIGINT		
		NAME	Join_2...	NVARC...		
		ORDERDAY	Join_2...	NVARC...		
		DAYCOUNT	Join_2...	BIGINT		

Pada bagian mapping tambahkan output data tersebut

The screenshot shows the same SAP Business Application Studio interface, but with the 'Mapping' tab selected in the 'Rank_2' properties pane. The 'Data Sources' list on the left includes 'Join_2' with columns: AGENCYCYN, NUMBOOKINGS, NAME, ORDERDAY, and DAYCOUNT. The 'Output Columns' list on the right includes 'AGENCYCYN', 'NUMBOOKINGS', 'NAME', 'ORDERDAY', and 'DAYCOUNT'. Arrows indicate the mapping from the data sources to the output columns.

16. Pada bagian definition, diubah menjadi seperti dibawah ini

The screenshot shows the SAP Business Application Studio interface. The Explorer on the left displays the project structure under 'BRT_Data'. The main editor shows a Semantic layer diagram with a 'Rank_2' node. The 'Rank_2' node is selected, and the 'Definition' tab is active. The 'General' section shows the 'Aggregation Function' set to 'Rank', 'Result Set Direction' to 'Top', and 'Result Set Type' to 'Absolute'. The 'Partition Column' section is empty. The 'Logical Partition' section is also empty. The 'Terminal' at the bottom shows a deployment message: 'Deployment ended at 2023-10-16 10:03:41 (3s 208ms)'.

The screenshot shows the same SAP Business Application Studio interface, but the 'Partition Column' section is now populated. The 'Logical Partition' section shows a table with one row: 'AGENCYNUM'. The 'Dynamic Partition Elements' section is empty. The 'Sort Column' section is also empty. The 'Terminal' at the bottom shows the same deployment message: 'Deployment ended at 2023-10-16 10:03:41 (3s 208ms)'.

The screenshot shows the same SAP Business Application Studio interface, but the 'Sort Column' section is now populated. The 'Sort Column' section shows a table with one row: 'DAYCOUNT' with a 'Sort Direction' of 'Descending'. The 'Dynamic Partition Elements' section is empty. The 'Terminal' at the bottom shows the same deployment message: 'Deployment ended at 2023-10-16 10:03:41 (3s 208ms)'.

17. Kemudian pada aggregation, tambahkan data ke dalam output

The screenshot shows the SAP Business Application Studio interface. In the workspace, the 'Aggregation' node is configured with the following mapping:

Data Sources	Output Columns
AGENCYNUM	AGENCYNUM
NUMBOOKINGS	NUMBOOKINGS
NAME	NAME
DAYCOUNT	DAYCOUNT

The 'Mapping' tab is selected, and the 'Output Columns' list on the right shows the mapped columns. The 'Properties' tab at the bottom shows the deployment status.

18. Kemudian dilakukan deploy dan klik HDI Container untuk melihat data tersebut

The screenshot shows the SAP Business Application Studio interface during deployment. The terminal output indicates the deployment is successful:

```
Finalizing... ok (0s 20ms)
Finalizing... ok (0s 20ms)
Making... ok (0s 327ms)
Enabling table replication for the container schema "BRT_DATA_HDI_DB_2"...
Enabling table replication for the container schema "BRT_DATA_HDI_DB_2"... ok (0s 9ms)
Starting make in the container "BRT_DATA_HDI_DB_2" with 1 files to deploy, 0 files to undeploy... ok (0s 366ms)
Deploying to the container "BRT_DATA_HDI_DB_2"... ok (0s 552ms)
No default-access-role handling needed; global role "BRT_DATA_HDI_DB_2::access_role" will not be adapted
Unlocking the container "BRT_DATA_HDI_DB_2"... ok (0s 8ms)
Unlocking the container "BRT_DATA_HDI_DB_2"... ok (0s 8ms)
Deployment to container "BRT_DATA_HDI_DB_2" done [Deployment ID: none].
Deployment ended at 2023-10-16 10:13:26 (2s 918ms)
```

The screenshot shows the SAP HANA Database Explorer interface. The 'Calc_BRT_Partners' table is selected, and the data is displayed in the 'Raw Data' view.

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