

Nama : Ineztri Situmeang

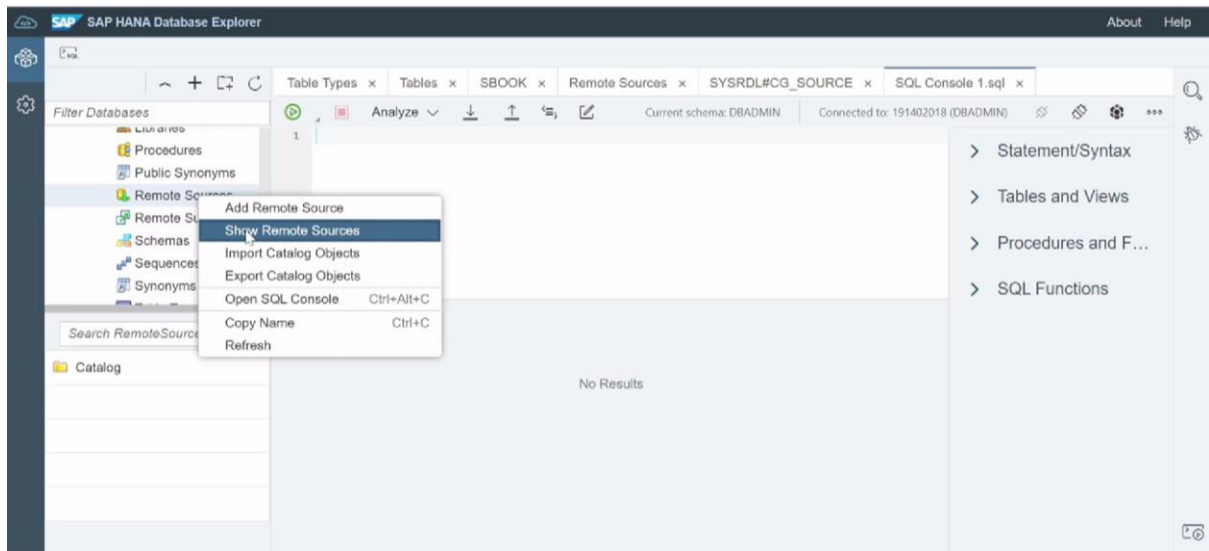
Nim : 191402018

Kom : C

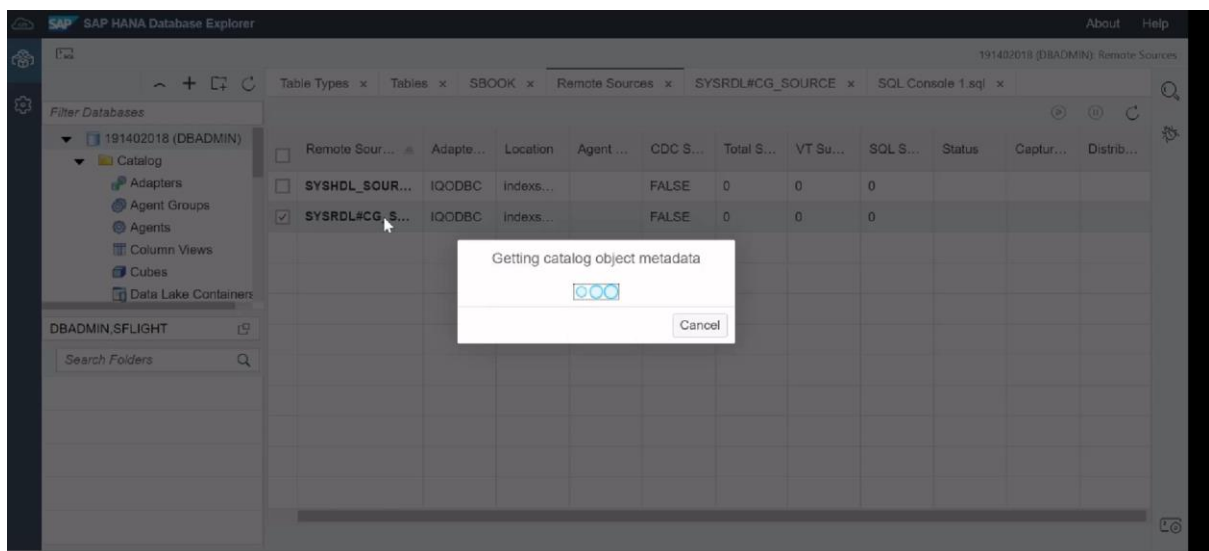
LAPORAN ENTERPRISE DEVELOPMENT SOFTWARE

Module 4

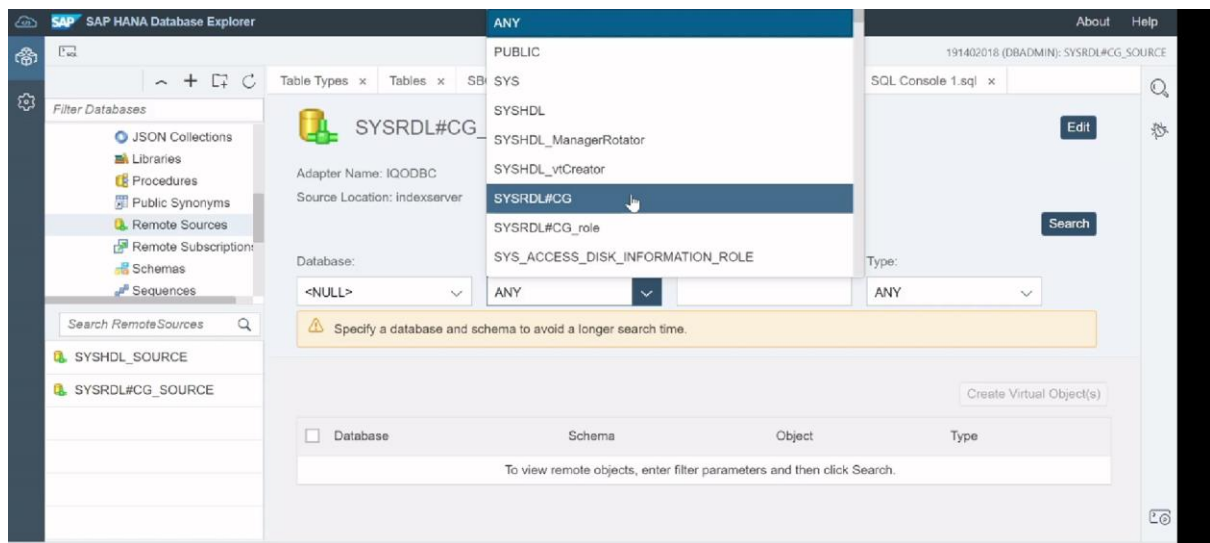
Buka SAP HANA Database Explorer, kemudian pilih Remote Source kemudian show remote source



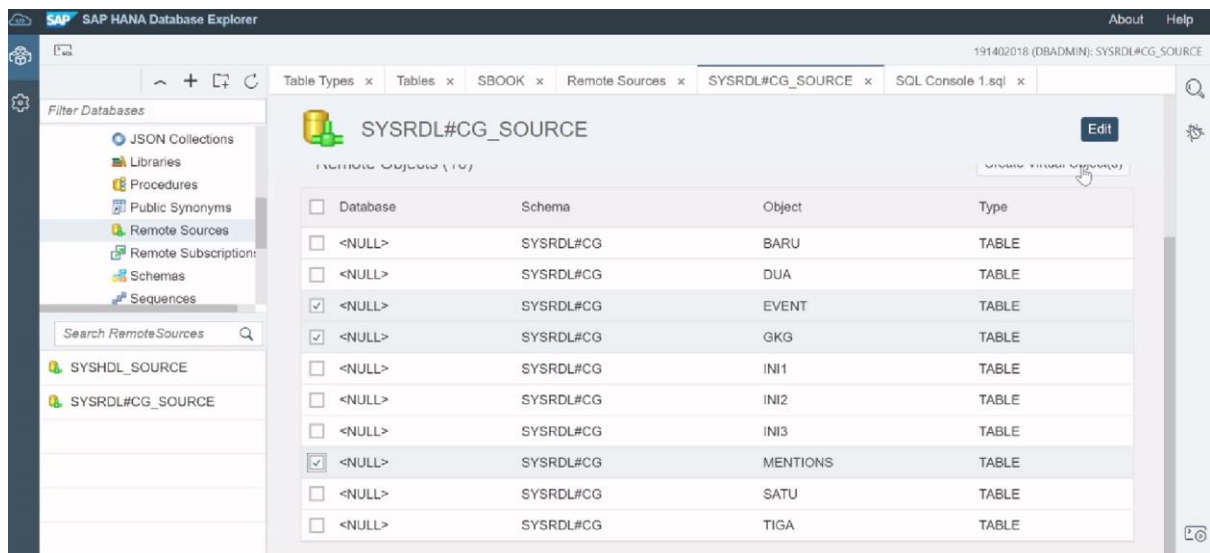
Pilih SYSRDL#CG_SOURCE



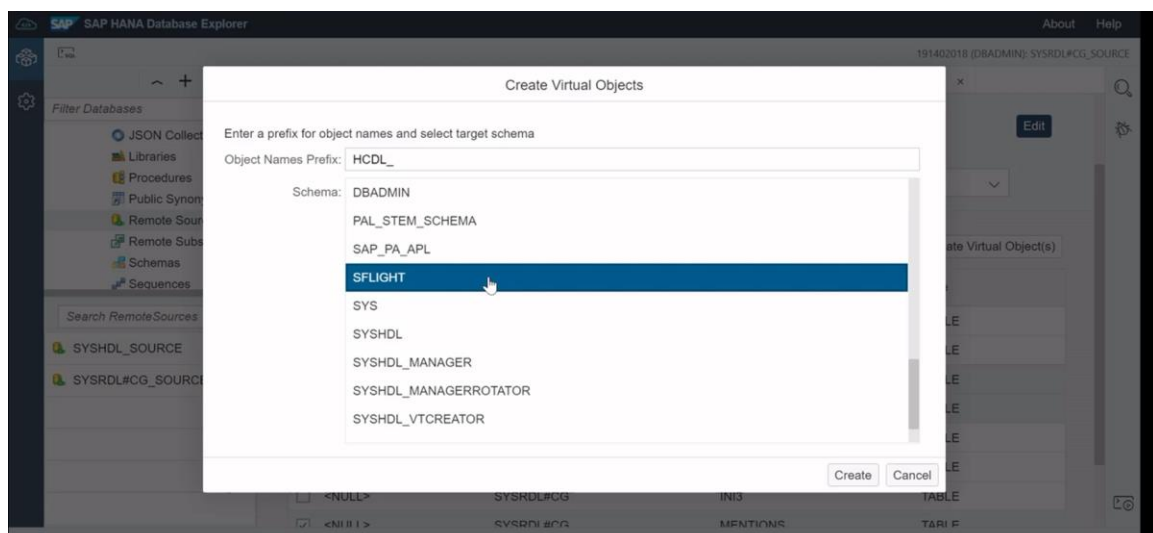
Ubah skema menjadi SYSRDL#CG



Selanjutnya pilih table EVENT, GKG, dan juga MENTIONS kemudian create virtual object.

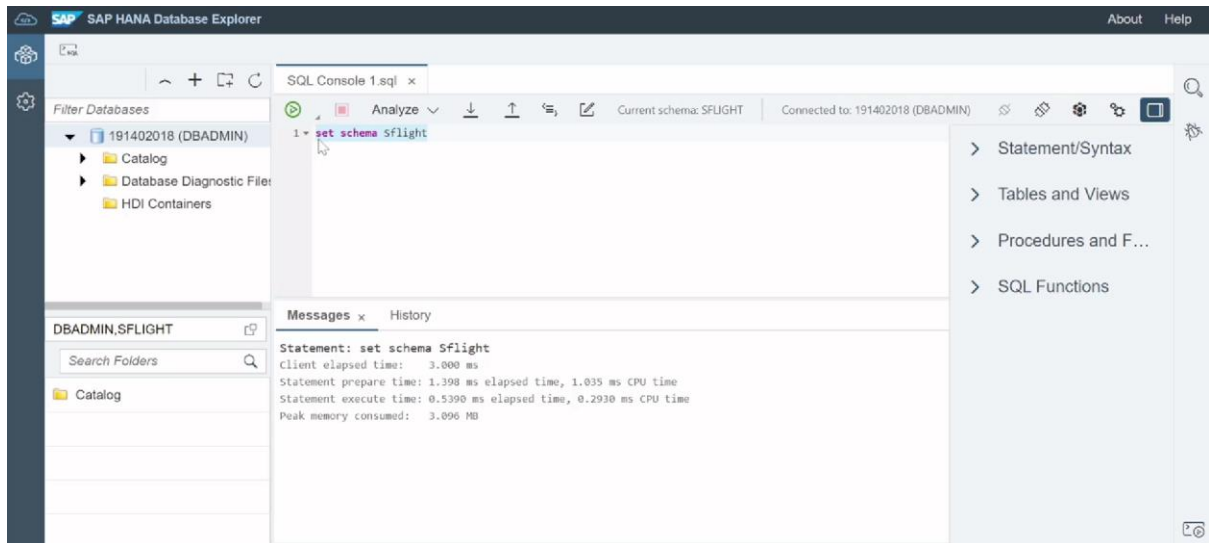


Selanjutnya ubah nama object menjadi HCDL kemudia pilih schema menjadi SFLIGHT

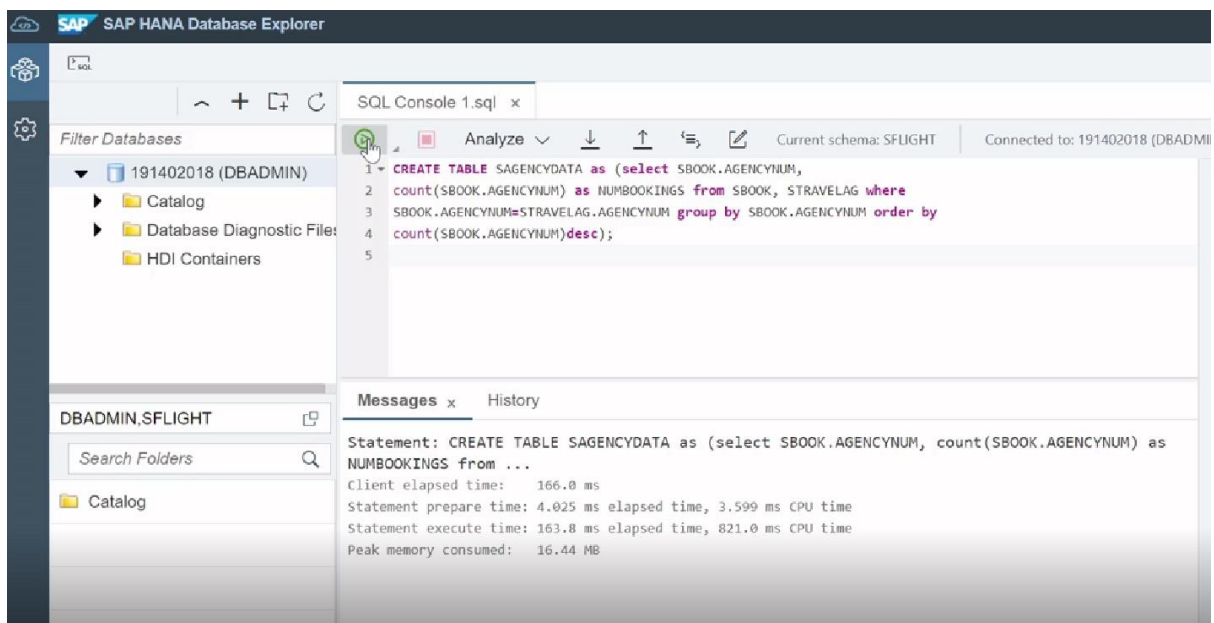


Modul 5

Pertama kita buat query schema untuk mengubah schema kita



Selanjutnya kita buat table pada query pertama modul ke 5



Cek query table yang telah kita buat.

Rows (49)		SQL	
	AGENCYNUM	NUMBOOKINGS	
20	00000200	24457	
21	00000310	24457	
22	00000123	24457	
23	00000124	24457	
24	00000103	24456	
25	00000319	24456	
26	00000297	24456	

Kemudian Copy Kembali query ke 2 pada modul 5 dan jalankan maka data akan ditampilkan

The screenshot shows the SAP HANA Database Explorer interface. The left pane displays the database structure for '191402018 (DBADMIN)'. The central pane shows a SQL query in the 'SQL Console 1.sql' editor. The query is a SELECT statement that joins 'SAGENCYDATA.AGENCYNUM' with 'SAGENCYDATA.STRAVELAG' on the condition 'SAGENCYDATA.AGENCYNUM = STRAVELAG.AGENCYNUM'. The results are displayed in a table with 5 rows.

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

Selanjutnya Copy query ke 3 pada modul 5 kemudian cek query menggunakan select * from nama table.

The screenshot shows the SAP HANA Database Explorer interface. The left pane displays the database structure for '191402018 (DBADMIN)'. The central pane shows a SQL query in the 'SQL Console 1.sql' editor. The query is a CREATE TABLE statement that creates a table named 'STOPAGENCY' with columns 'AGENCYNUM', 'ORDERDAY', and 'DAYCOUNT'. The results are displayed in a table with 6 rows.

	AGENCYNUM	ORDERDAY	DAYCOUNT
1	00000121	SATURDAY	3406
2	00000087	SATURDAY	3708
3	00000301	FRIDAY	3523
4	00000124	FRIDAY	3476
5	00000112	SATURDAY	3515
6	00000119	SATURDAY	3378

Statement: CREATE TABLE STOPAGENCY as (select top 5 SAGENCYDATA.AGENCYNUM, ...
 Client elapsed time: 31.00 ms
 Statement prepare time: 3.735 ms elapsed time, 3.257 ms CPU time
 Statement execute time: 29.47 ms elapsed time, 27.55 ms CPU time
 Peak memory consumed: 6.203 MB

	AGENCYNUM	ORDERDAY	DAYCOUNT
1	00000121	SATURDAY	3406
2	00000087	SATURDAY	3708
3	00000301	FRIDAY	3523
4	00000124	FRIDAY	3476
5	00000112	SATURDAY	3515
6	00000119	SATURDAY	3378

Selanjutnya copy query ke 4, kemudian jalankan

The screenshot shows the SAP HANA SQL Console interface. The left pane displays the database structure for '191402018 (DBADMIN)', including 'Catalog', 'Database Diagnostic Files', and 'HDI Containers'. The main pane shows the SQL Console with a query being executed. The query is a CREATE TABLE statement for 'SAGBOOKDAYS' based on a subquery. The right pane shows the execution messages, including the statement text and performance metrics.

```
1 CREATE TABLE SAGBOOKDAYS as (select AGENCYNUM, dayname(ORDER_DATE) as  
2 ORDERDAY, count(dayname(ORDER_DATE)) as DAYCOUNT from SBOOK group by  
3 AGENCYNUM, dayname(ORDER_DATE));
```

Statement: CREATE TABLE SAGBOOKDAYS as (select AGENCYNUM, dayname(ORDER_DATE) as ORDERDAY, ...
Client elapsed time: 304.0 ms
Statement prepare time: 4.765 ms elapsed time, 4.140 ms CPU time
Statement execute time: 302.5 ms elapsed time, 2.609 s CPU time
Peak memory consumed: 21.66 MB

Hasil :

The screenshot shows the 'Result' tab of the SAP HANA SQL Console. It displays a table with 350 rows. The columns are AGENCYNUM, ORDERDAY, and DAYCOUNT. The data shows the day of the week for each agency and the corresponding day count.

	AGENCYNUM	ORDERDAY	DAYCOUNT
1	00000121	SATURDAY	3406
2	00000087	SATURDAY	3708
3	00000301	FRIDAY	3523
4	00000124	FRIDAY	3476
5	00000112	SATURDAY	3515
6	00000119	SATURDAY	3378

Terakhir copy query ke 5 maka akan menampilkan data orderday paling banyak adalah hari kamis

The screenshot shows the SAP HANA SQL Console interface. The left pane displays the database structure for '191402018 (DBADMIN)'. The main pane shows the SQL Console with a query being executed. The query is a SELECT statement that joins 'SAGBOOKDAYS' with 'STOPAGENCY' and filters for the day of the week. The right pane shows the execution messages.

```
1 SELECT SAGBOOKDAYS.AGENCYNUM, STOPAGENCY.NAME, SAGBOOKDAYS.ORDERDAY,  
2 SAGBOOKDAYS.DAYCOUNT from SAGBOOKDAYS INNER JOIN STOPAGENCY on  
3 SAGBOOKDAYS.AGENCYNUM=STOPAGENCY.AGENCYNUM where SAGBOOKDAYS.DAYCOUNT in  
4 (select max(DAYCOUNT) from SAGBOOKDAYS group by AGENCYNUM);
```

Statement: SELECT SAGBOOKDAYS.AGENCYNUM, STOPAGENCY.NAME, SAGBOOKDAYS.ORDERDAY, ...
Client elapsed time: 304.0 ms
Statement prepare time: 4.765 ms elapsed time, 4.140 ms CPU time
Statement execute time: 302.5 ms elapsed time, 2.609 s CPU time
Peak memory consumed: 21.66 MB

Module 6

Buka Kembali SAP HANA dan temukan SAP Business Application Studio

The screenshot shows the SAP BTP Cockpit interface. On the left, the navigation menu includes Overview, Services, Service Marketplace, Instances and Subscriptions (selected), Cloud Foundry, HTML5 Applications, Connectivity, Security, Entitlements, Usage Analytics, Help and Support, Useful Links, and Legal Information. The main content area displays the 'Subaccount: trial - Instances and Subscriptions' page. It shows a search bar, a table of subscriptions (1), and a table of instances (3). The 'SAP Business Application Studio' subscription is highlighted with a 'Subscribed' status. The right sidebar shows the 'SAP Business Application Studio' overview, including its plan (trial), status (Subscribed), creation date (16 Sep 2021), and a 'Go to Application' button. Below this, there is a description of the studio and additional links for documentation and the discovery center.

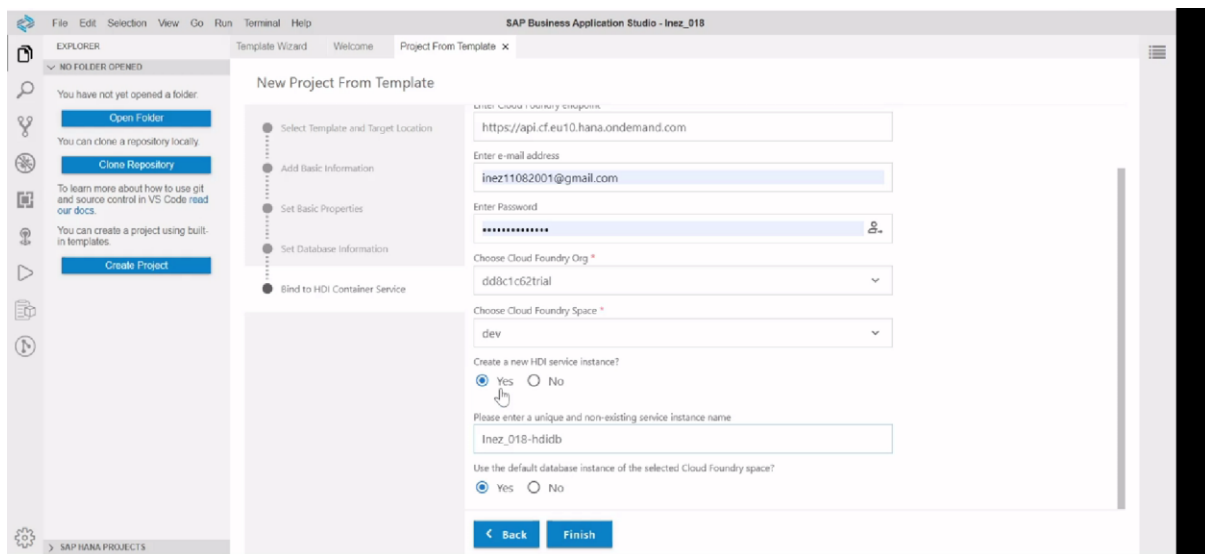
Buat New Dev Space dengan memilih SAP HANA Native Application

The screenshot shows the 'Create a New Dev Space' dialog in SAP Business Application Studio. The 'Inez_018' workspace is selected. The 'What kind of application do you want to create?' section has 'SAP HANA Native Application' selected. The 'SAP HANA Native Application Dev Space' section provides a description of the dev space and lists predefined extensions: SAP HANA Tools, MTA Tools, and Basic SAP version of Theia IDE. The 'Additional SAP Extensions' section allows selecting additional extensions: CDS, SAP HANA Performance Tools, HTML5 Runner, and HTML5 Application Template. The 'Create Dev Space' button is highlighted.

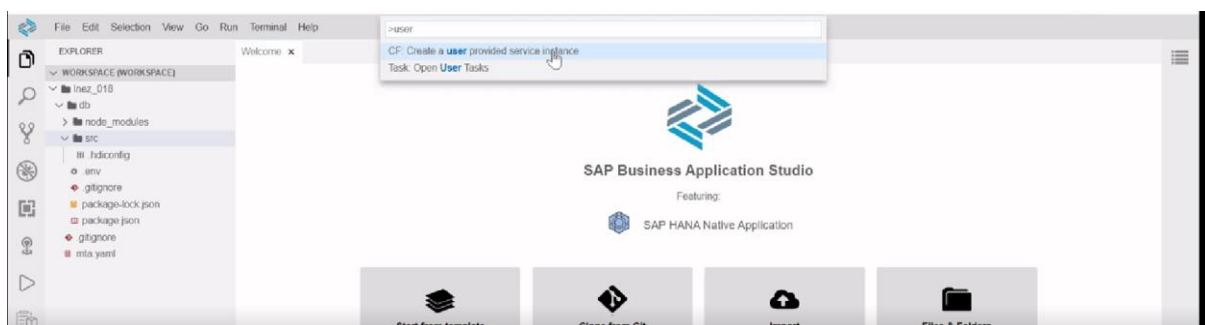
Tunggu sampai proses running

The screenshot shows the 'Dev Spaces' page in SAP Business Application Studio. It displays a table of development spaces. The 'Inez_018' workspace, which is a 'SAP HANA Native Application', is shown in a 'RUNNING' state. The table includes columns for the workspace name, status, creation date (10/23/2021 11:00 AM), ID (ws-brdb2), and disk usage (16 MB / 3.9 GB). A 'Create Dev Space' button is visible in the top right corner.

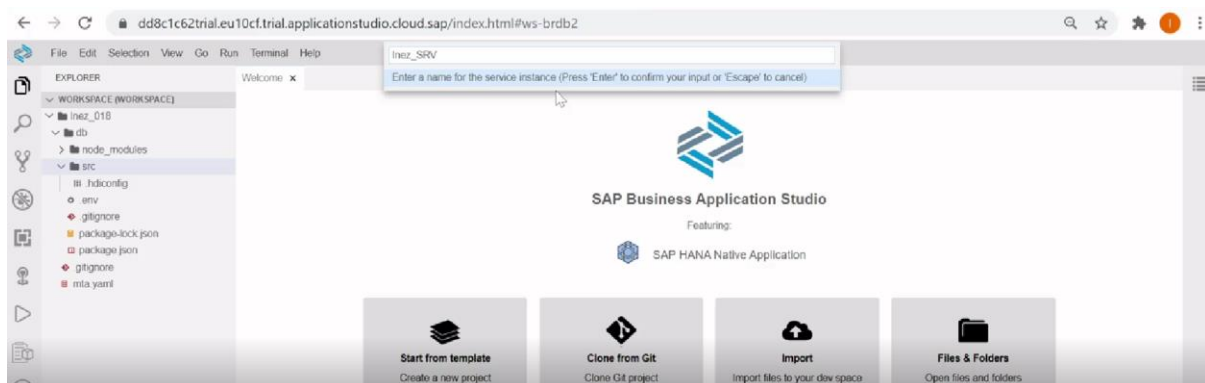
Setelah proses running buka dev spaces nya kemudian masukkan data yang diperlukan. Pada bagian akhir masukkan email dan password kemudian klik finish. Maka proses genarting dilakukan.



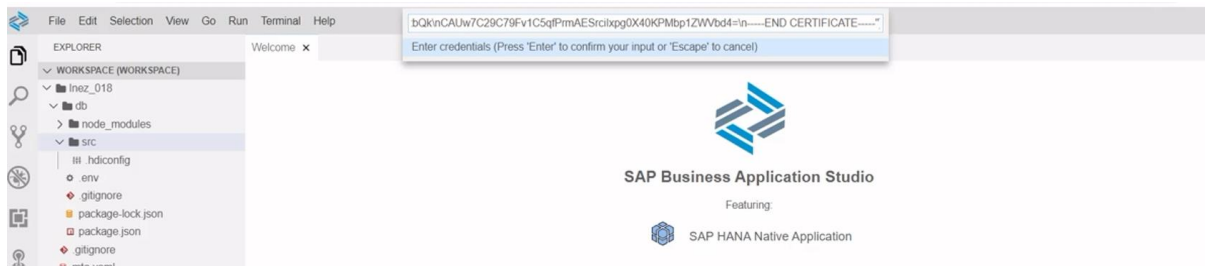
Setelah selesai, maka kita akan masuk ke halaman project kita. Pilih view kemudian find document dan klik Create a user Provider service instance



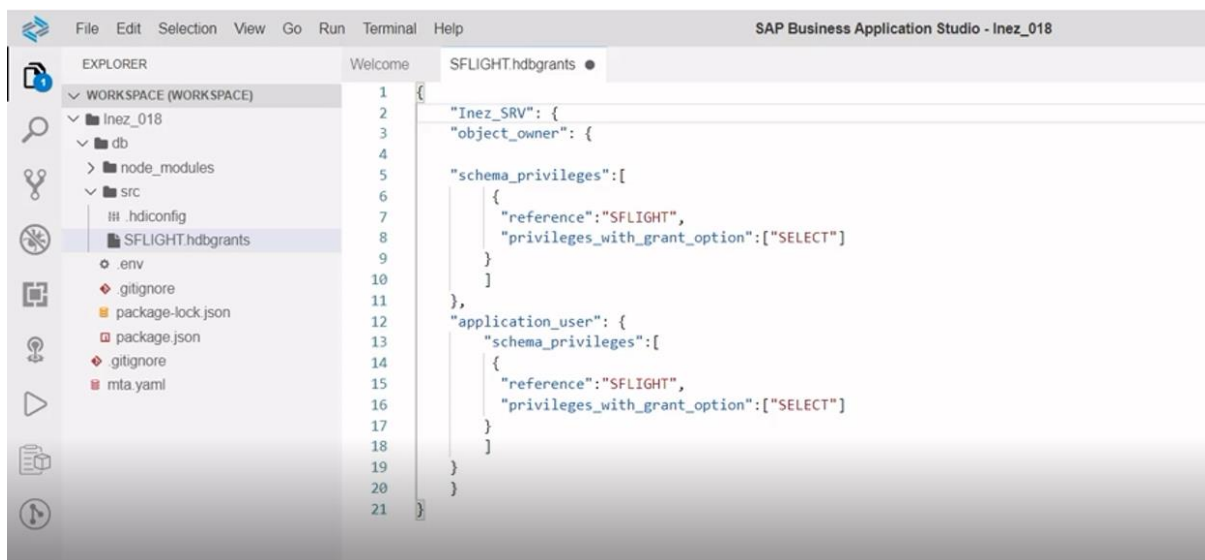
Buat nama server sesuai yang anda inginkan



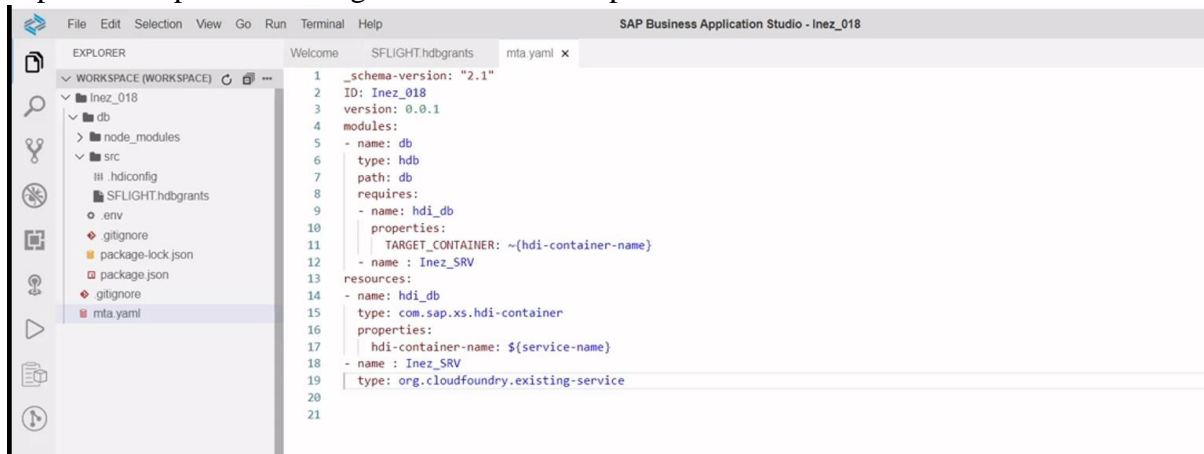
Copy bagian sertificate ini pada kurung kurawal setelah membuat nama server

[illegible]

Selanjutnya upload file SFLIGHT kemudia ubah menjadi nama server kita.



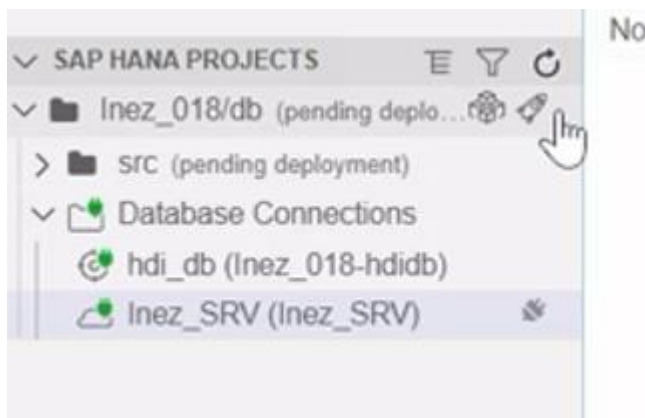
Setelah itu buka mta.yaml dan tambahkan name juga type untuk melanjutkan program. File dapat dilihat pada [mtachanges1608587428557.pdf](#)



The screenshot shows the SAP Business Application Studio interface with the 'mta.yaml' file open. The Explorer on the left shows the project structure for 'Inez_018', including 'db' and 'src' folders. The main editor displays the following YAML content:

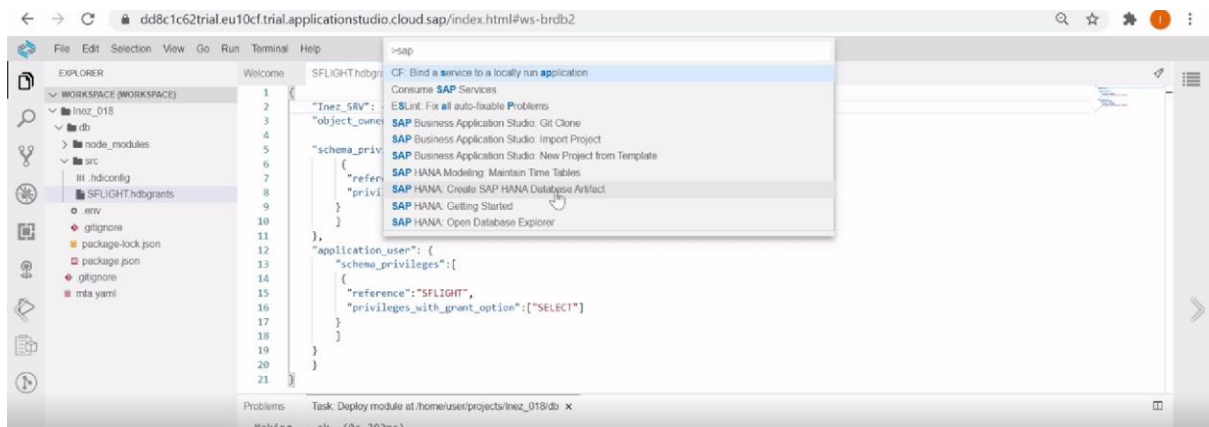
```
1 _schema-version: "2.1"
2 ID: Inez_018
3 version: 0.0.1
4 modules:
5   - name: db
6     type: hdb
7     path: db
8     requires:
9       - name: hdi_db
10         properties:
11           TARGET_CONTAINER: ~(hdi-container-name)
12     - name : Inez_SRV
13 resources:
14   - name: hdi_db
15     type: com.sap.xs.hdi-container
16     properties:
17       hdi-container-name: ${service-name}
18   - name : Inez_SRV
19     type: org.cloudfoundry.existing-service
20
21
```

Selanjutnya jalankan server kita. Jika tidak ada error maka modul 6 selesai diproses

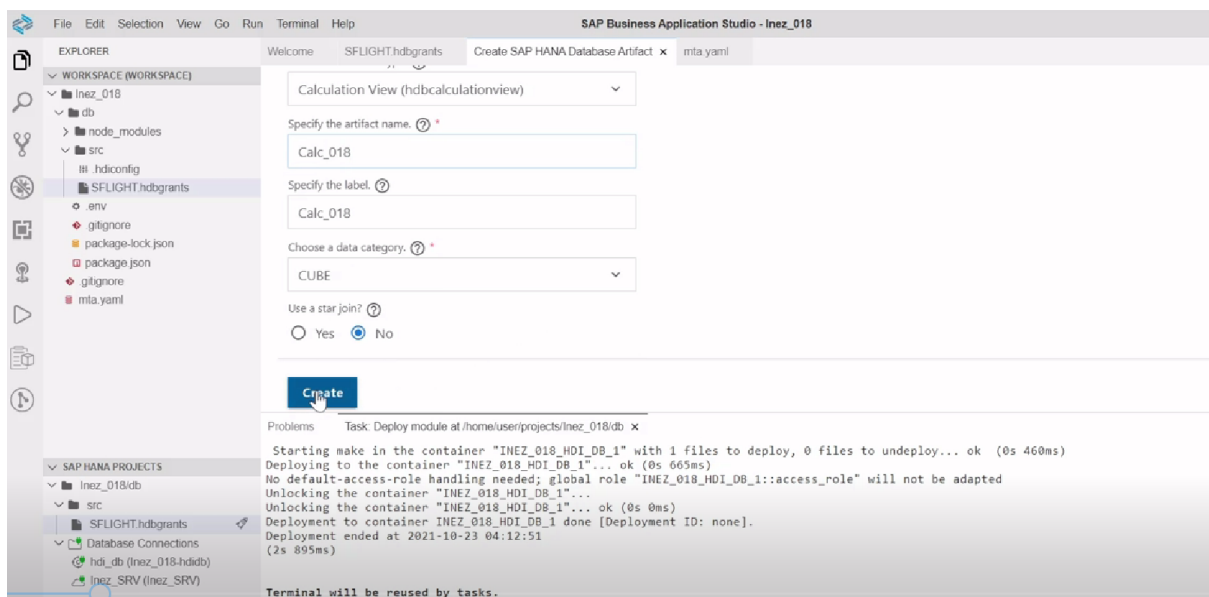


Modul 7

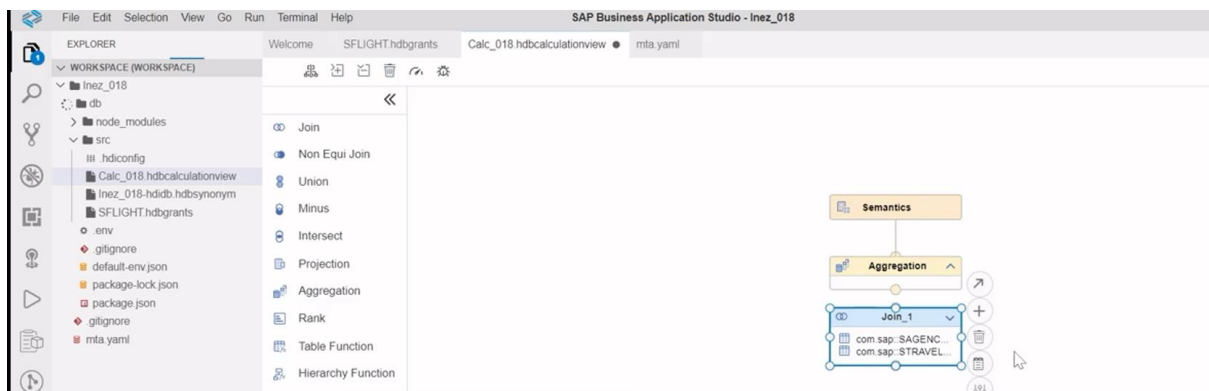
Buka Kembali SAP Hana kemudian klik view, find document dan ketikkan SAP HANA Create Database Artifact.



Setelah itu buka file artifact nya kemudian ubah artifactnya menjadi calculation view dan berikan Namanya Calc_nim, kemudian klik create



Kemudian pilih file calculation yang sudah dibuat tadi dan tambahkan join pada prosesnya, kemudian tambahkan data sagency dan stravel pada join 1



Selanjutnya hubungkan agencynum yg ada pada agency ke stravel

Join_1

Join Definition Mapping Calculated Columns (0) Parameters (0) Columns (0)

Left: com.sap::SAGENCYDATA Right: com.sap::STRAVELAG

Left Columns: AGENCYNUM Right Columns: AGENCYNUM

Task: Deploy module at /home/user/projects/Inez_018/db x

Deployment ended at 2021-10-22 04:18:16

Kemudian drag mapping yang ada pada join sat uke bagian output columns

Join_1

Join Definition Mapping Calculated Columns (0) Parameters (0) Columns (3) F

Data Sources

- com.sap::SAGENCYDATA
 - AGENCYNUM
 - NUMBOOKINGS
- com.sap::STRAVELAG
 - MANDT
 - AGENCYNUM
 - NAME
 - STREET

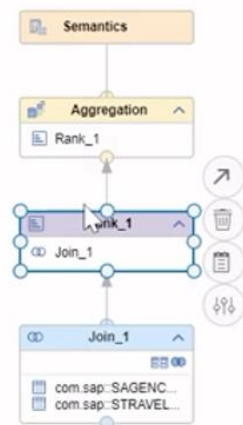
Output Columns

- AGENCYNUM
- NUMBOOKINGS
- NAME

Drag & drop here

PROPERTIES

Selanjutnya tambahkan Rank_1 pada aggregation dan join_1



Tambahkan data pada rank1 dan lihat apakah outputnya sudah sama pada join_1

Kemudian cek data cal_018 pada database Sap hana kita

SAP HANA Database Explorer

SharedDevKey@Inez_018-hdldb (dev): INEZ_018_HDI_DB_1.C

Table Types x Calc_018 x Calc_018 x

Analysis Raw Data

Rows (5)

	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

The screenshot displays the SAP HANA Studio interface. On the left, the 'Semantics' tree shows a hierarchy of objects: 'Join_2' (Aggregation) containing 'Join_2' (Join) which contains 'Rank_1' (Rank). This 'Rank_1' is joined with 'Join_1' (Join), which contains 'Rank_1' (Rank) and 'Table Function' (Table Function). The 'Table Function' is linked to 'com.sap::SAGENC' and 'com.sap::STRAVEL...'. The main workspace shows the 'Join_2' mapping tab, which visualizes the join between 'Rank_1' and 'com.sap::SAGBOOKDAYS'. The 'Rank_1' table has columns AGENCYCNUM, NUMBOOKINGS, and NAME. The 'com.sap::SAGBOOKDAYS' table has columns AGENCYCNUM, ORDERDAY, and DAYCOUNT. The mapping shows a join on AGENCYCNUM. The 'PROPERTIES' tab is also visible, showing the join type as 'Left' and the columns being joined.

SAP Business Application Studio - Inez_018

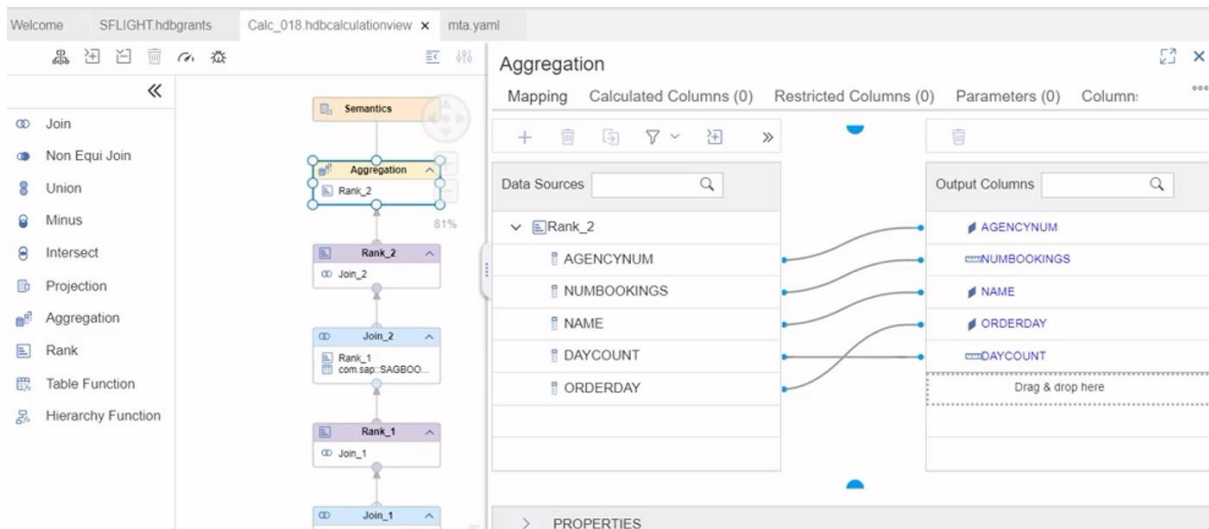
Welcome SFLIGHT.hdbgrants Calc_018.hdbcalculationview x mta.yaml

Rank_2

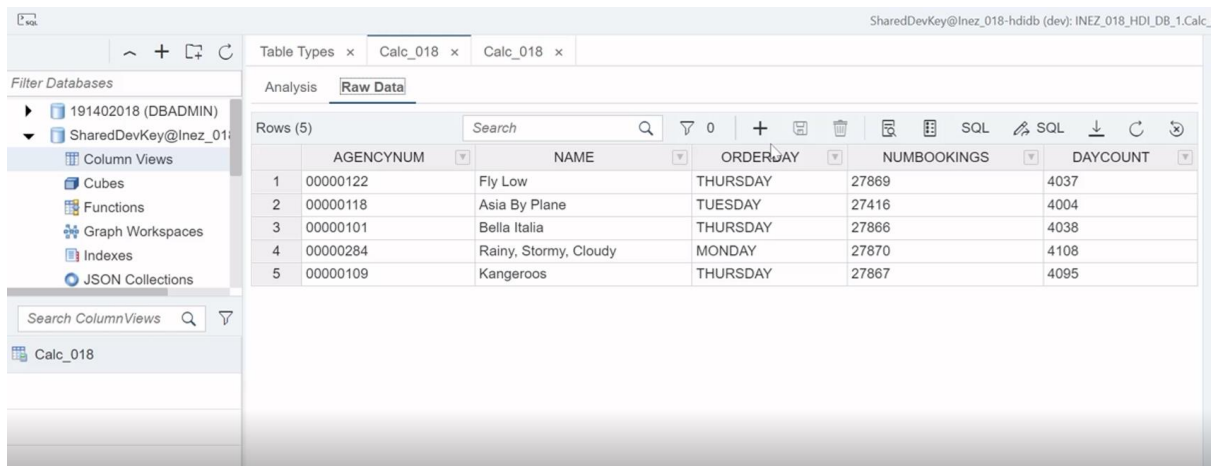
Mapping Definition Parameters (0) Columns (5) Filter Expression

	N...	Type	Name	Mapping	Data Type	Semantics	Ke...
<input type="checkbox"/>			AGENCYNUM	Join_2_AGE...	NVARCHA...		<input type="checkbox"/>
<input type="checkbox"/>			NUMBOOKING	Join_2_NU...	BIGINT		<input type="checkbox"/>
<input type="checkbox"/>			NAME	Join_2_NAME	NVARCHA...		<input type="checkbox"/>
<input type="checkbox"/>			DAYCOUNT	Join_2_DAY...	BIGINT		<input type="checkbox"/>
<input type="checkbox"/>			ORDERDAY	Join_2_OR...	NVARCHA...		<input type="checkbox"/>

Kemudia, drug kebagian output columnsnya

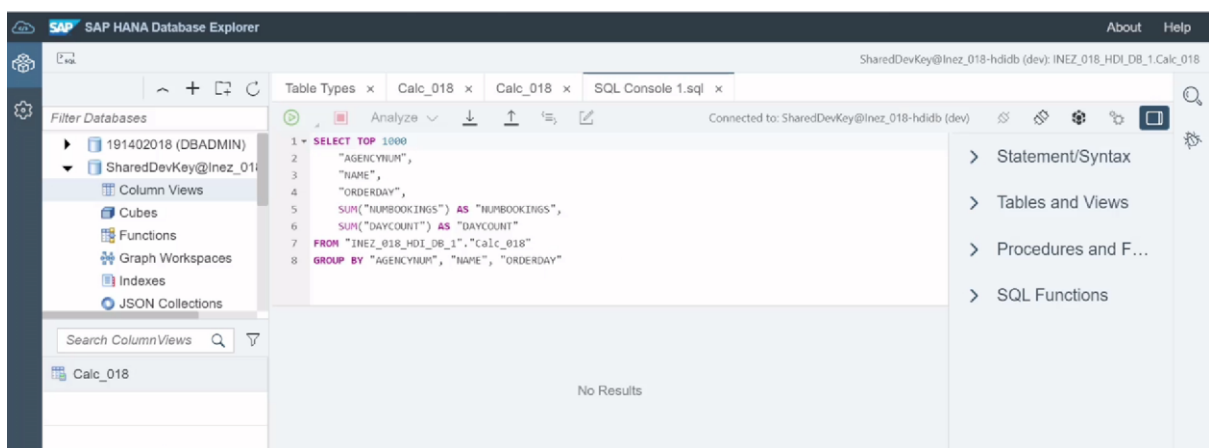


Kemudian cek Kembali file cal_018 dan lihat data yang ditampilkan.

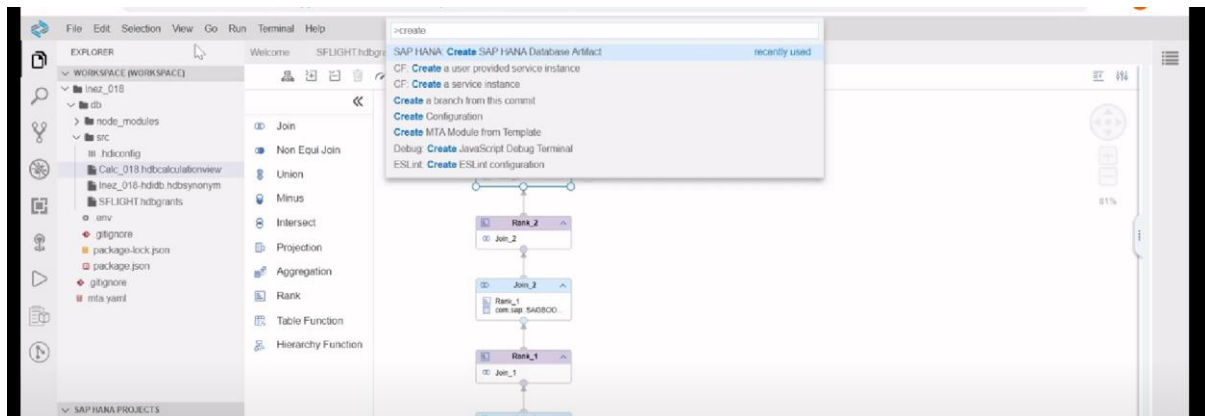


Modul 8

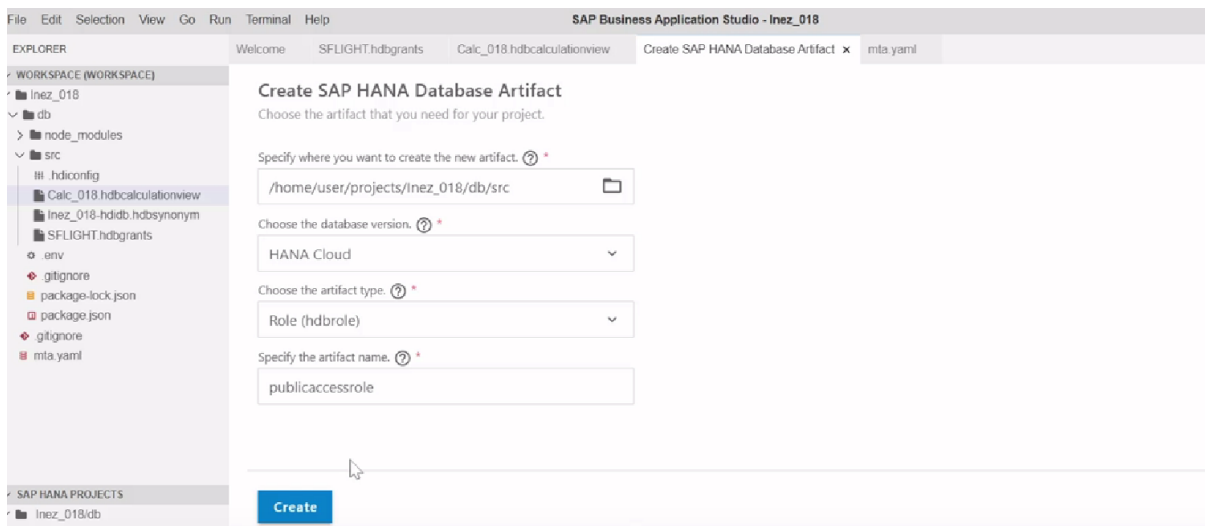
Buka database explorer dan column views kemudian buka genarete select statement, selanjutnya akan ditampilkan file sql.



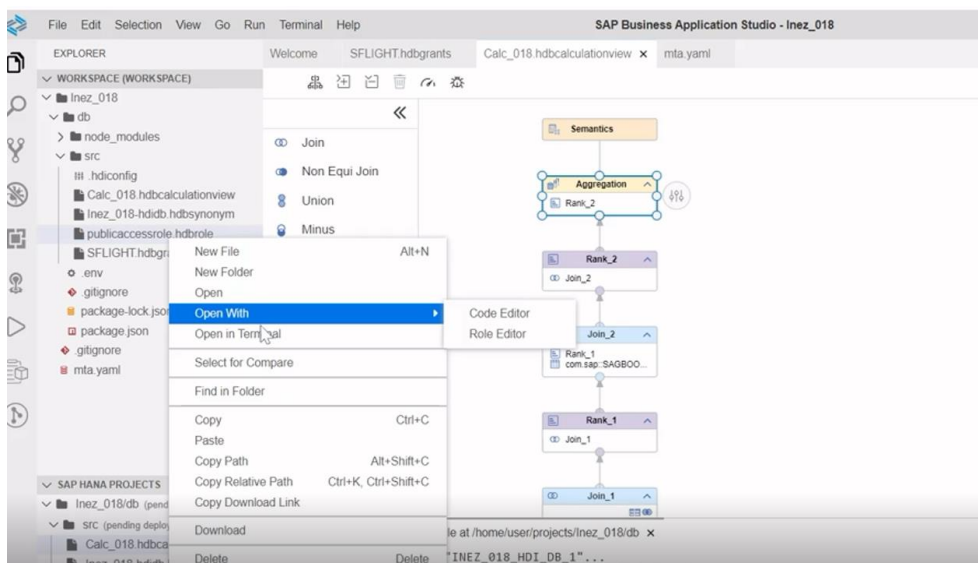
Selanjutnya pilih view, find document dan ketikkan create SAP HANA Database Artifact



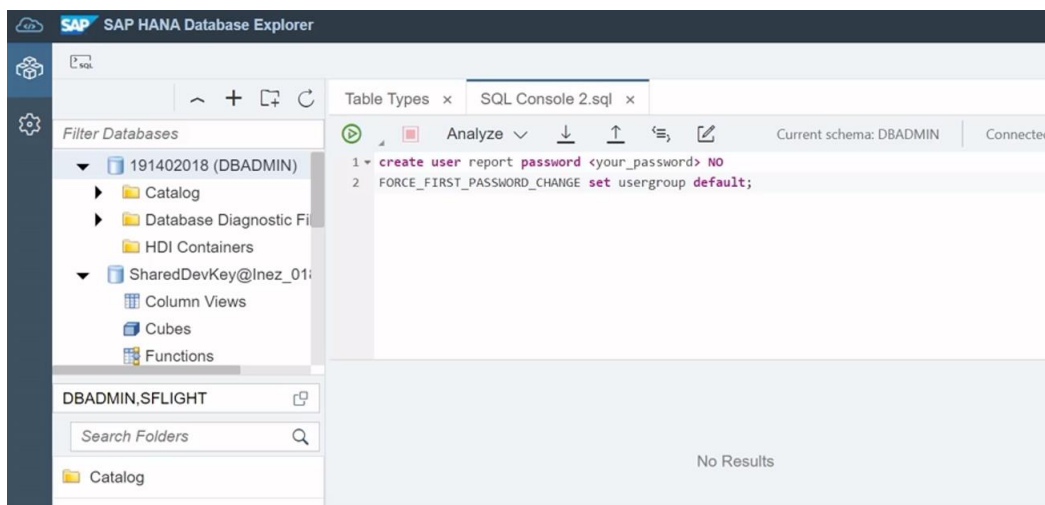
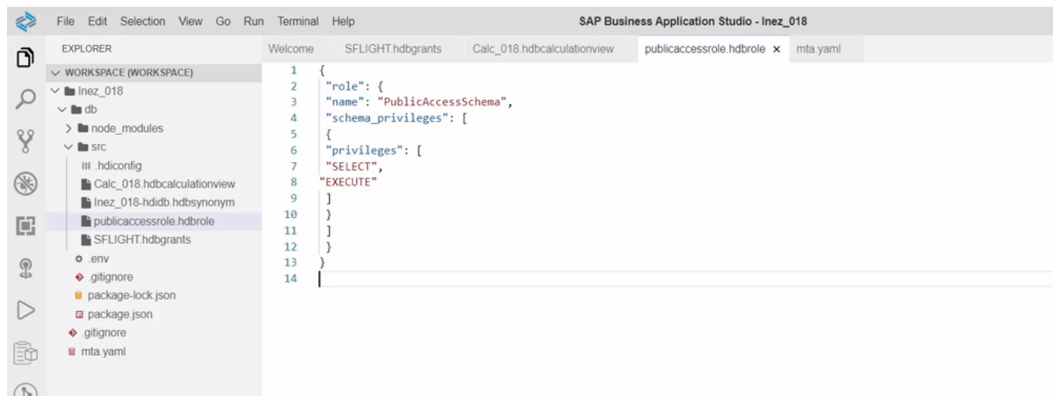
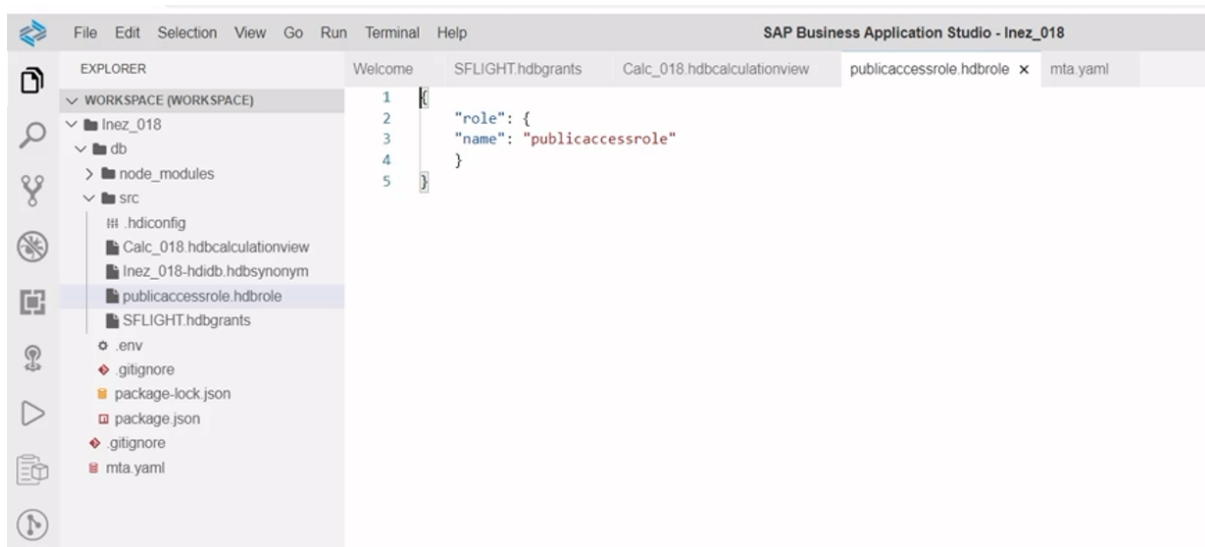
Selanjutnya ubah bagian artifact type menjadi role dan buat nama artifact nya menjadi publicaccessrole



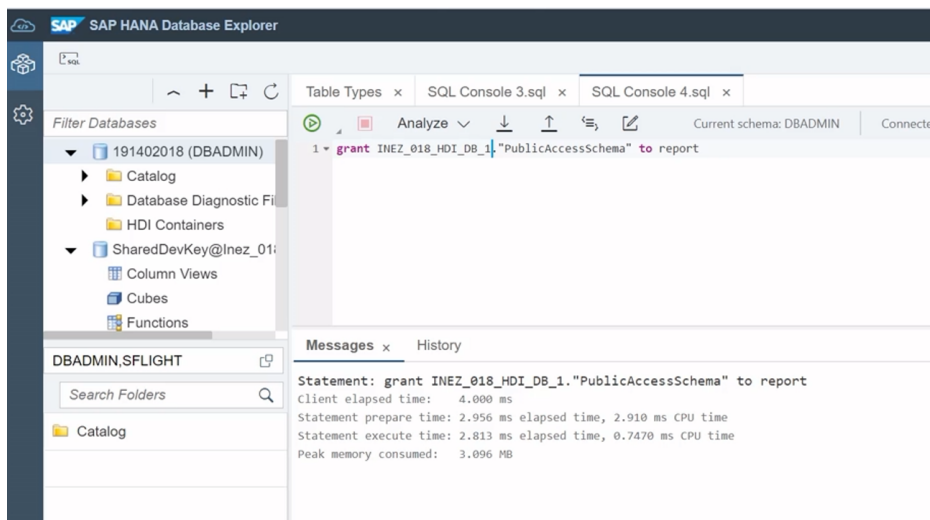
Selanjutnya open file nya dengan klik kanan, open with dan code editor



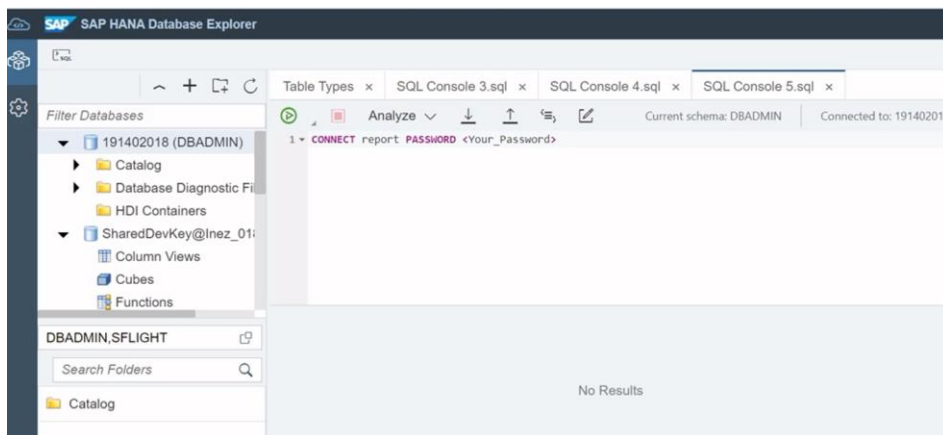
Maka akan menampilkan kode sebagai berikut



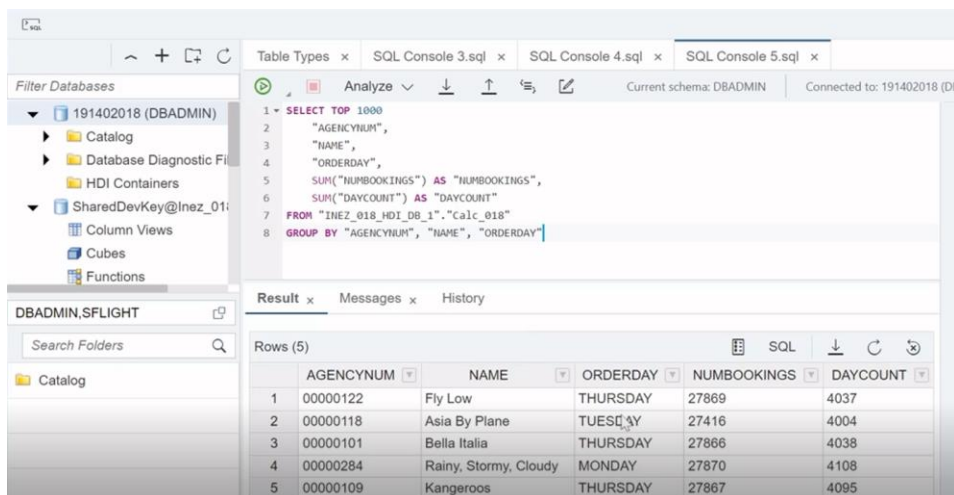
Kemudian copy kembali syntax ke 3 kemudian ganti namanya dengan nama database kita



Selanjutnya masukkan username dan password yang kita buat tadi, dan jalankan.



Jika tidak terdapat error, copy Kembali query database kita, kemudian jalankan di console. Nah, hasil nya sebagai berikut. Database kita sudah dapat diakses secara public.



Sekian dari UTS EDS saya, Saya ucapkan terimakasih.