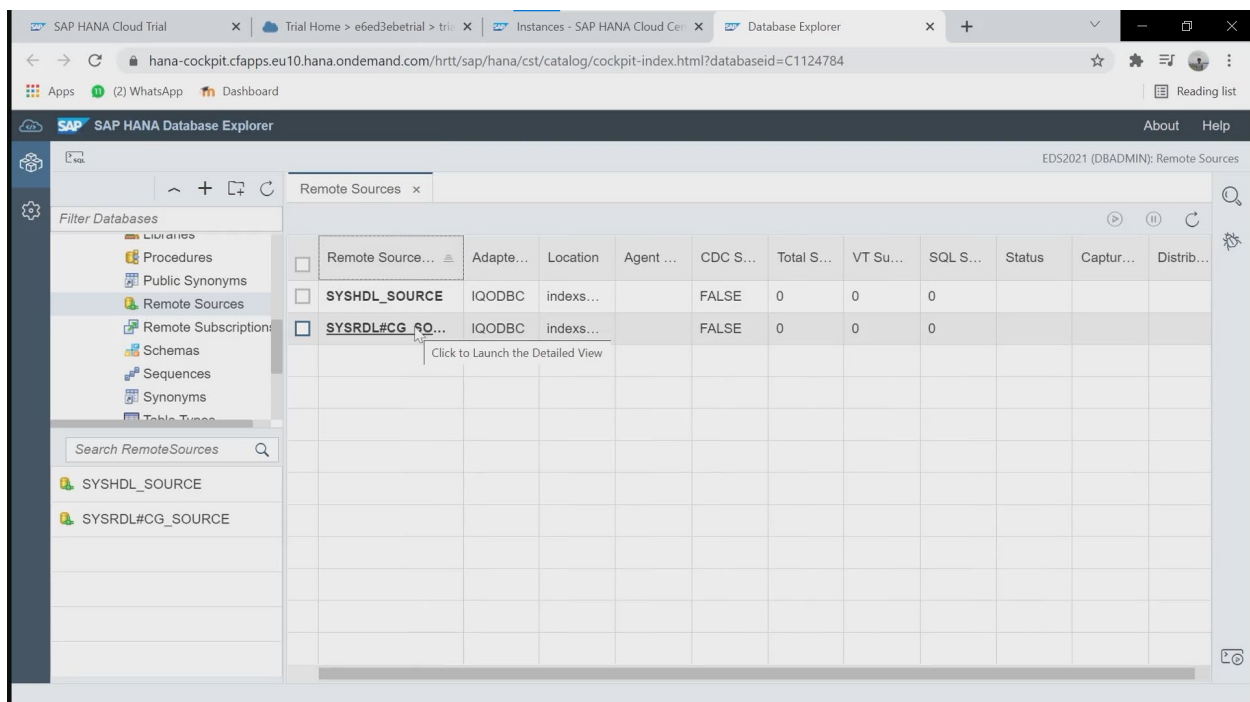
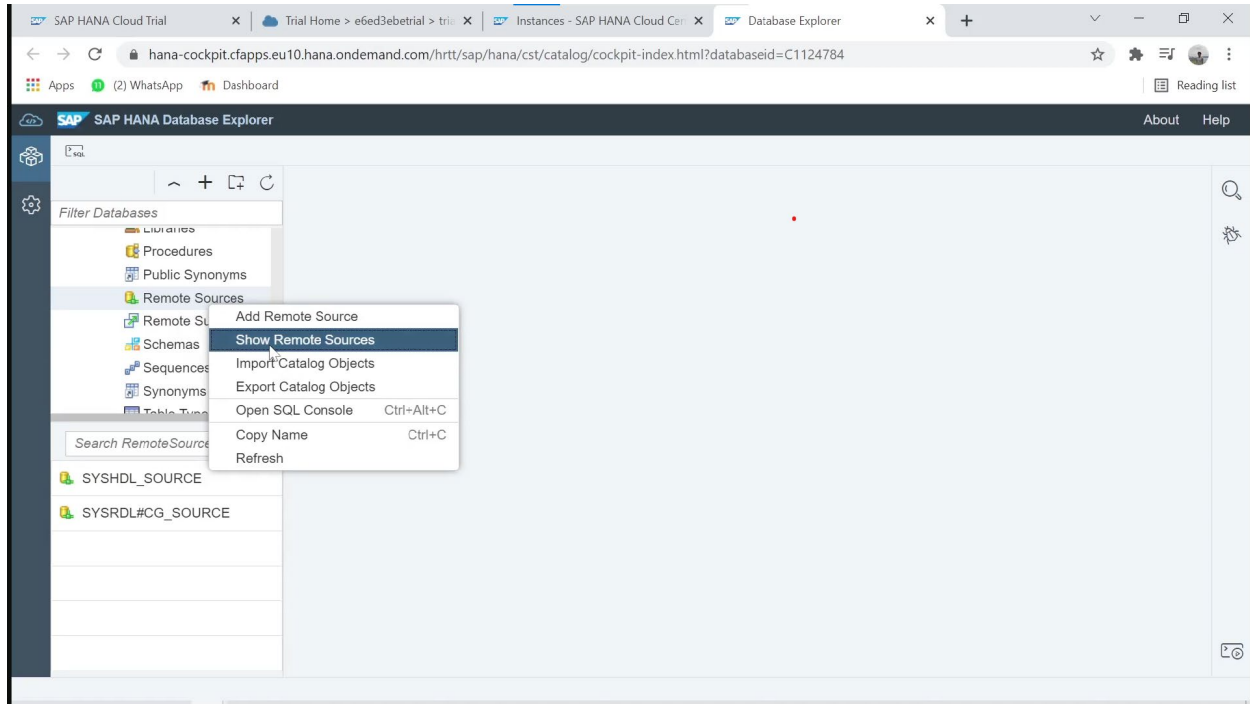


Nama : Ricky Martin Abdi Negara Purba
NIM : 1914012126

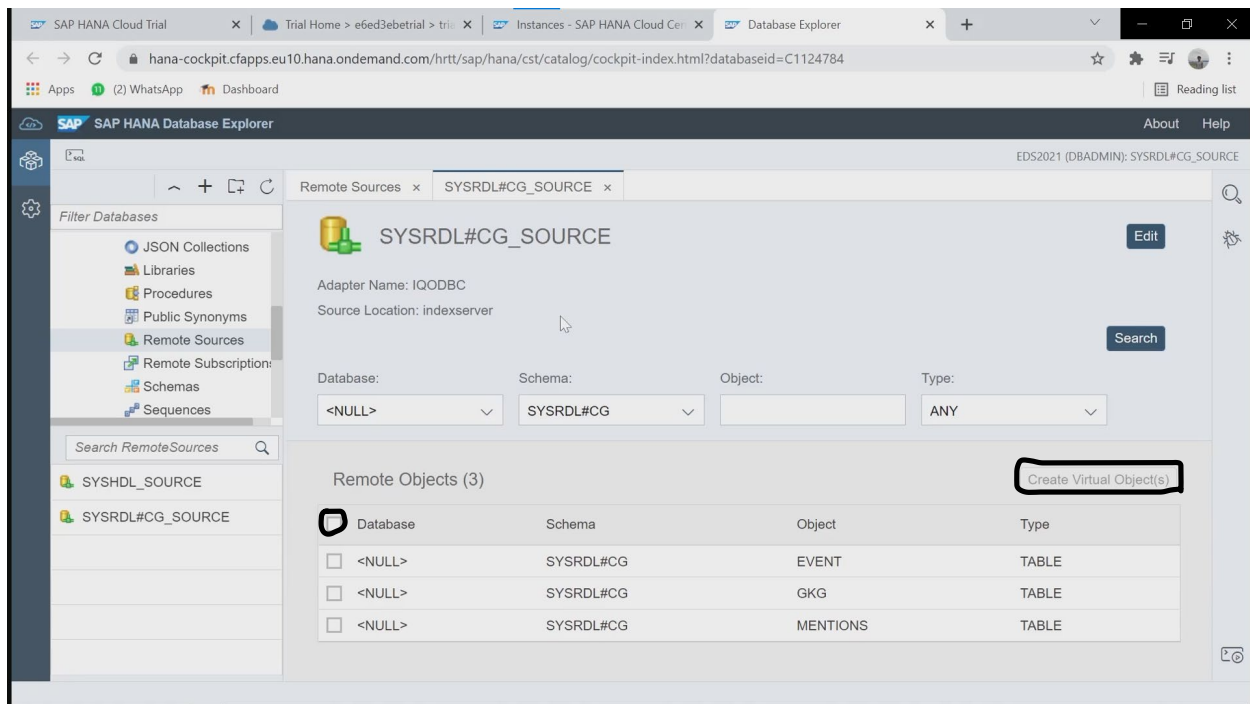
Laporan EDS

1. MENGHUBUNGKAN DAN MEMBUAT DATA DI SAP HANA CLOUD DATA LAKE

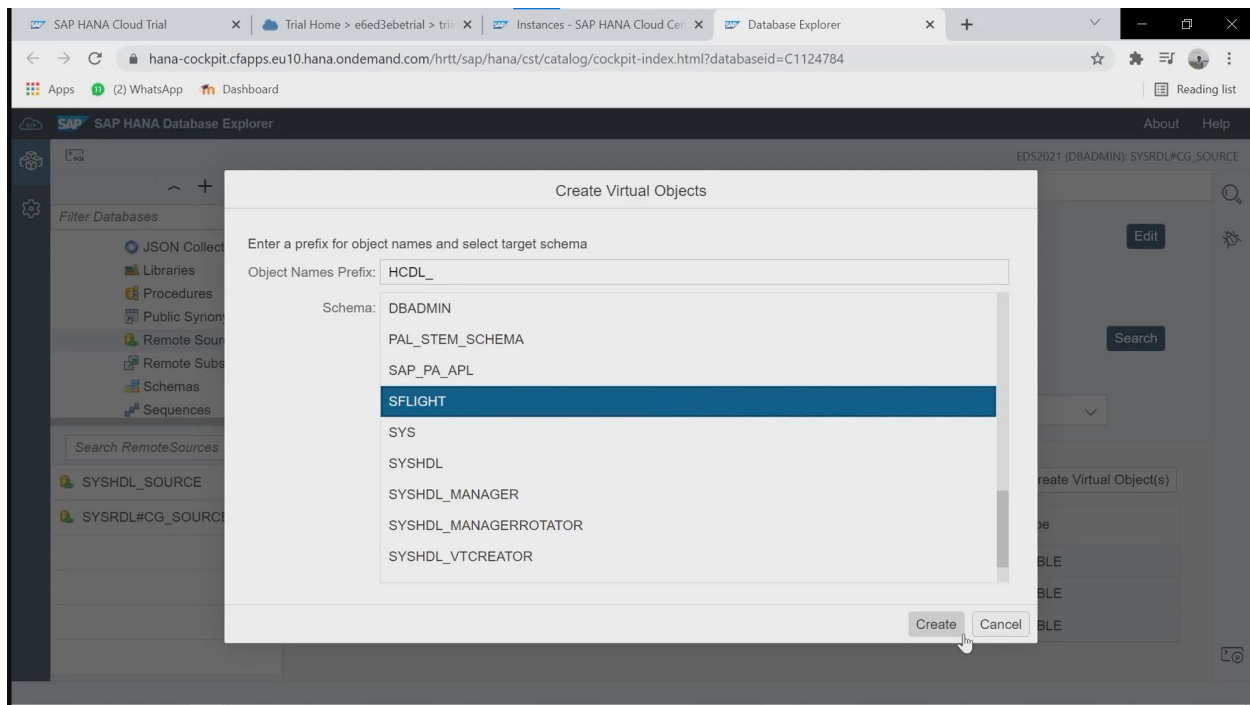
- Menampilkan *Remote Sources* yang dimana sebelum nya sudah mengimport query



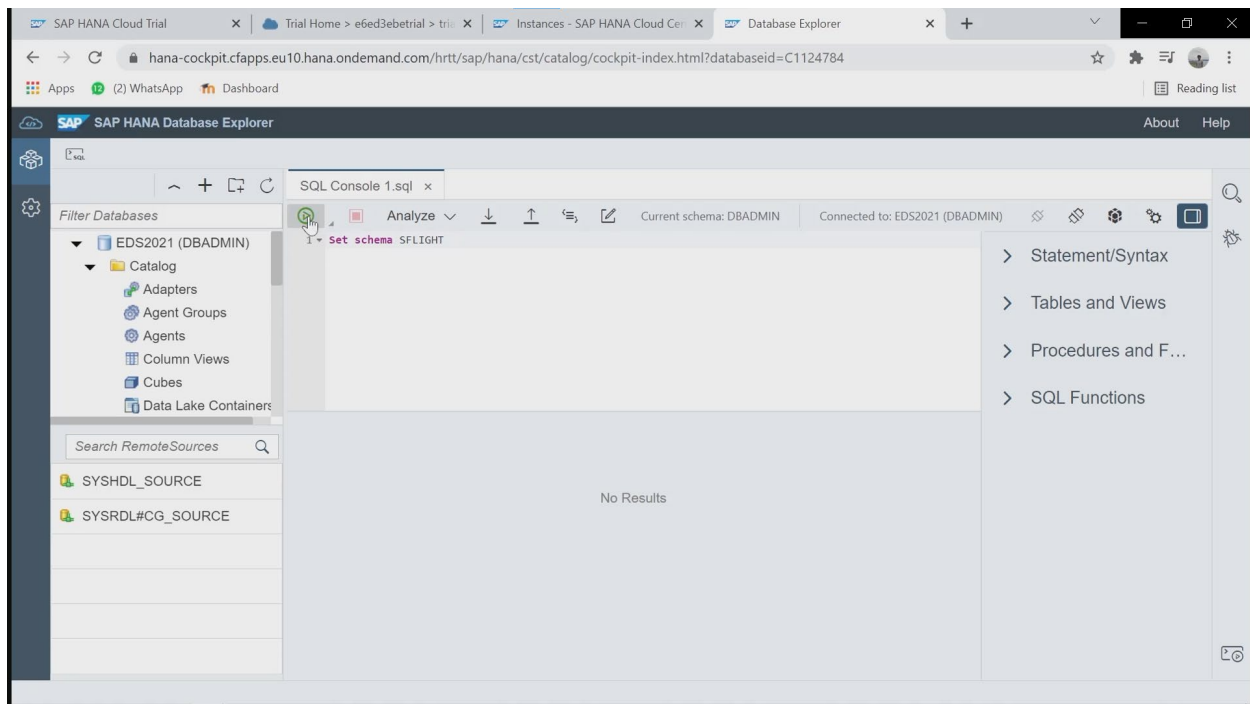
Tampilan Schema "SYSRDL#CG" setelah di lakukan pencarian dilanjutkan dengan mencentang database dan melakukan create visual object



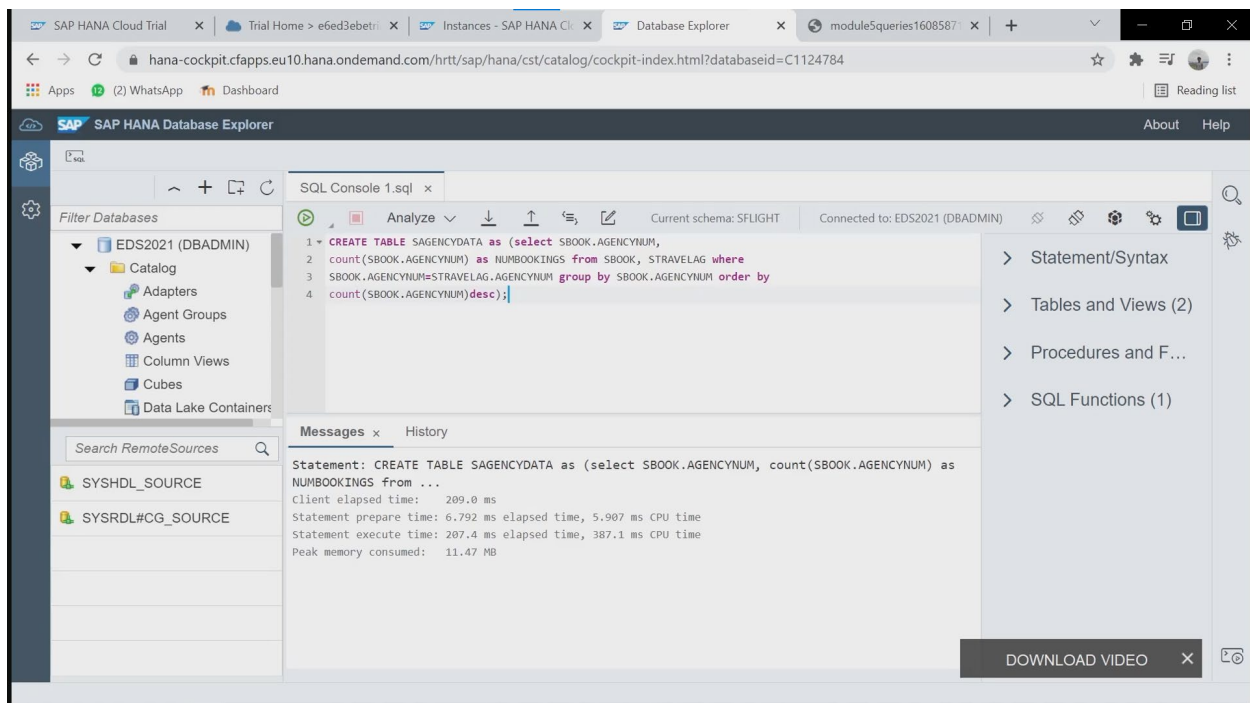
Create Visual Objects dengan nama objek nya HCDL_ dan menggunakan schema SFLIGHT



Masuk ke menu query dan set schema nya menjadi SFLIGHT



Buat Table dengan query yg sudah di atur sebelumnya



Tampilan pada table SAGENCYDATA yg telah di buat

The screenshot shows the SAP HANA Database Explorer interface. The SQL Console displays a query: `SELECT * FROM SAGENCYDATA`. The results are shown in a table with 49 rows. The table has two columns: AGENCYNUM and NUMBOOKINGS.

	AGENCYNUM	NUMBOOKINGS
1	00000284	27870
2	00000122	27869
3	00000109	27867
4	00000101	27866
5	00000118	27416
6	00000087	25936

Melakukan Select terhadap 5 top data

The screenshot shows the SAP HANA Database Explorer interface. The SQL Console displays a query: `SELECT TOP 5 SAGENCYDATA.AGENCYNUM, STRAVELAG.NAME, SAGENCYDATA.NUMBOOKINGS FROM SAGENCYDATA INNER JOIN STRAVELAG ON SAGENCYDATA.AGENCYNUM = STRAVELAG.AGENCYNUM;`. The results are shown in a table with 5 rows. The table has three columns: AGENCYNUM, NAME, and NUMBOOKINGS.

	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

Query untuk membuat STOPAGENCY table

The screenshot shows the SAP HANA Database Explorer interface. The left sidebar displays the database structure for EDS2021 (DBADMIN), including Catalog, Adapters, Agent Groups, Agents, Column Views, Cubes, and Data Lake Containers. The main area shows the SQL Console with a query titled "SQL Console 1.sql". The query is as follows:

```
1 CREATE TABLE STOPAGENCY as (select top 5 SAGENCYDATA.AGENCYNUM,  
2 STRAVELAG.NAME, SAGENCYDATA.NUMBOOKINGS from SAGENCYDATA INNER JOIN  
3 STRAVELAG on SAGENCYDATA.AGENCYNUM = STRAVELAG.AGENCYNUM);  
4
```

The right sidebar shows a navigation menu with options: Statement/Syntax, Tables and Views (2), Procedures and F..., and SQL Functions. The bottom section displays the execution results in the Messages pane:

Statement: CREATE TABLE STOPAGENCY as (select top 5 SAGENCYDATA.AGENCYNUM, ...
Client elapsed time: 33.00 ms
Statement prepare time: 4.076 ms elapsed time, 3.473 ms CPU time
Statement execute time: 31.50 ms elapsed time, 29.10 ms CPU time
Peak memory consumed: 6.203 MB

A "DOWNLOAD VIDEO" button is visible at the bottom right.

Query untuk membuat table SAGBOOKDAYS

The screenshot shows the SAP HANA Database Explorer interface. The left sidebar displays the database structure for EDS2021 (DBADMIN), including Catalog, Adapters, Agent Groups, Agents, Column Views, Cubes, and Data Lake Containers. The main area shows the SQL Console with a query titled "SQL Console 3.sql". The query is as follows:

```
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));  
4
```

The right sidebar shows a navigation menu with options: Statement/Syntax, Tables and Views (1), Procedures and F..., and SQL Functions (2). The bottom section displays the execution results in the Messages pane:

Statement: CREATE TABLE SAGBOOKDAYS as (select AGENCYNUM, dayname(ORDER_DATE) as ORDERDAY, ...
Client elapsed time: 369.0 ms
Statement prepare time: 4.207 ms elapsed time, 3.814 ms CPU time
Statement execute time: 367.9 ms elapsed time, 1.392 s CPU time
Peak memory consumed: 20.60 MB

A "DOWNLOAD VIDEO" button is visible at the bottom right.

Tampilannya

The screenshot shows the SAP HANA Database Explorer interface. The left sidebar displays the database catalog with 'EDS2021 (DBADMIN)' selected. The main area shows a SQL console with the query: `1 SELECT * FROM SAGBOOKDAYS`. The results are displayed in a table with 350 rows. The table has columns: AGENCYNUM, ORDERDAY, and DAYCOUNT. The first six rows are visible.

	AGENCYNUM	ORDERDAY	DAYCOUNT
1	00000121	SATURDAY	3406
2	00000087	SATURDAY	3708
3	00000301	FRIDAY	3523
4	00000124	FRIDAY	3476
5	00000000	THURSDAY	26899
6	00000087	FRIDAY	3692

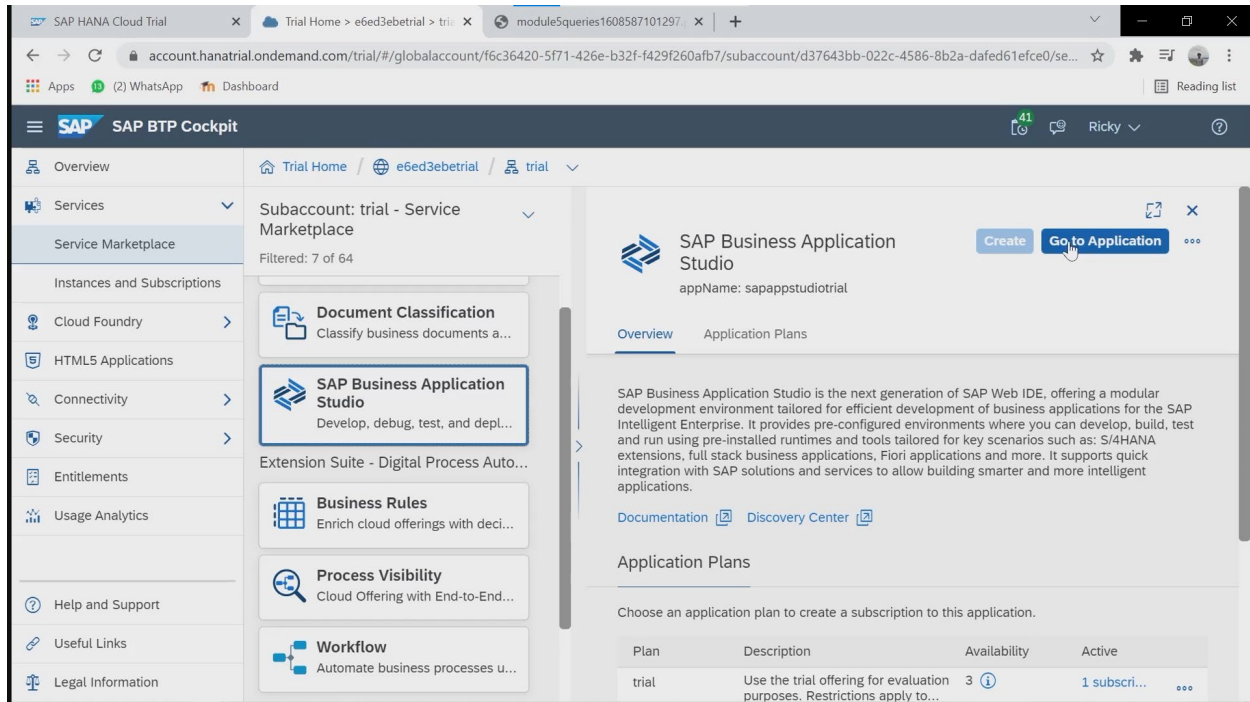
Query untuk mendapatkan hari pemesanan maksimal untuk masing-masing dari 5 agensi teratas

The screenshot shows the SAP HANA Database Explorer interface. The left sidebar displays the database catalog with 'EDS2021 (DBADMIN)' selected. The main area shows a SQL console with the query: `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);`. The results are displayed in a table with 5 rows. The table has columns: AGENCYNUM, NAME, ORDERDAY, and DAYCOUNT. The first five rows are visible.

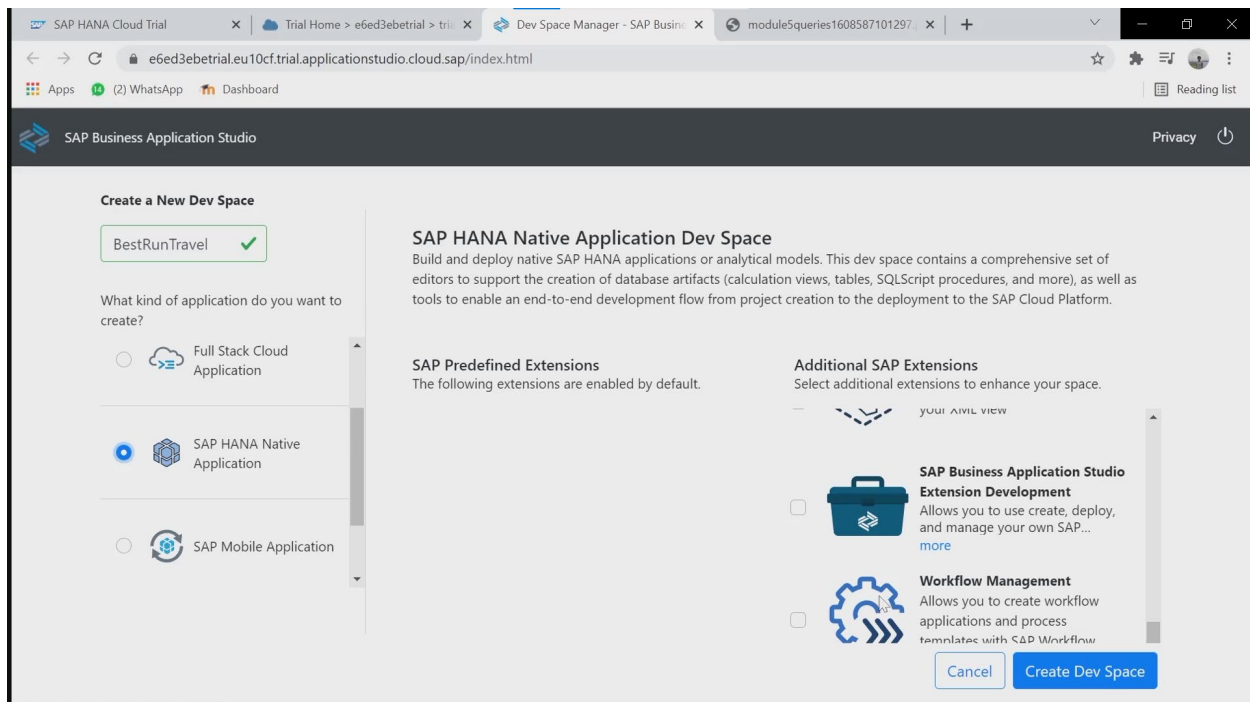
	AGENCYNUM	NAME	ORDERDAY	DAYCOUNT
1	00000122	Fly Low	THURSDAY	4037
2	00000109	Kangeroos	THURSDAY	4095
3	00000101	Bella Italia	THURSDAY	4038
4	00000118	Asia By Plane	TUESDAY	4004
5	00000284	Rainy, Stormy, Cloudy	MONDAY	4108

MENYIAPKAN PROYEK HANA DI STUDIO APLIKASI BISNIS SAP

- Lakukan pencarian SAP Business Application Studio pada service marketplace
- Pilih Go to Application



- Create Dev Space dengan nama 'BestRunTravel'
- Pilih SAP HANA Native Application Lalu Create Dev Space



- Pilih SAP HANA Database Project
- Lalu isi Basic Information
- Lalu masukan email dan password lalu klik login

SAP HANA Cloud Trial

Explorer: NO FOLDER OPENED

Project From Template

New Project From Template

- Select Template and Target Location
- Add Basic Information
- Set Basic Properties
- Set Database Information
- Bind to HDI Container Service

Enter Cloud Foundry endpoint
https://api.cf.eu10.hana.ondemand.com

Enter e-mail address
[redacted]

Enter Password
[redacted]

Login

Choose Cloud Foundry Org *
Click to display the list of options

Choose Cloud Foundry Space *
Click to display the list of options

Back Finish

- Masukkan nama dengan keunikan yang terjamin

SAP HANA Cloud Trial

Explorer: NO FOLDER OPENED

Project From Template

New Project From Template

- Select Template and Target Location
- Add Basic Information
- Set Basic Properties
- Set Database Information
- Bind to HDI Container Service

Choose Cloud Foundry Org *
e6ed3ebetrial

Choose Cloud Foundry Space *
dev

Create a new HDI service instance?
☒ Yes ☐ No

Please enter a unique and non-existing service instance name
ESD_dataContainer

Use the default database instance of the selected Cloud Foundry space?
☒ Yes ☐ No

Back Finish

- Generating SAP HANA Database Project Open Output View

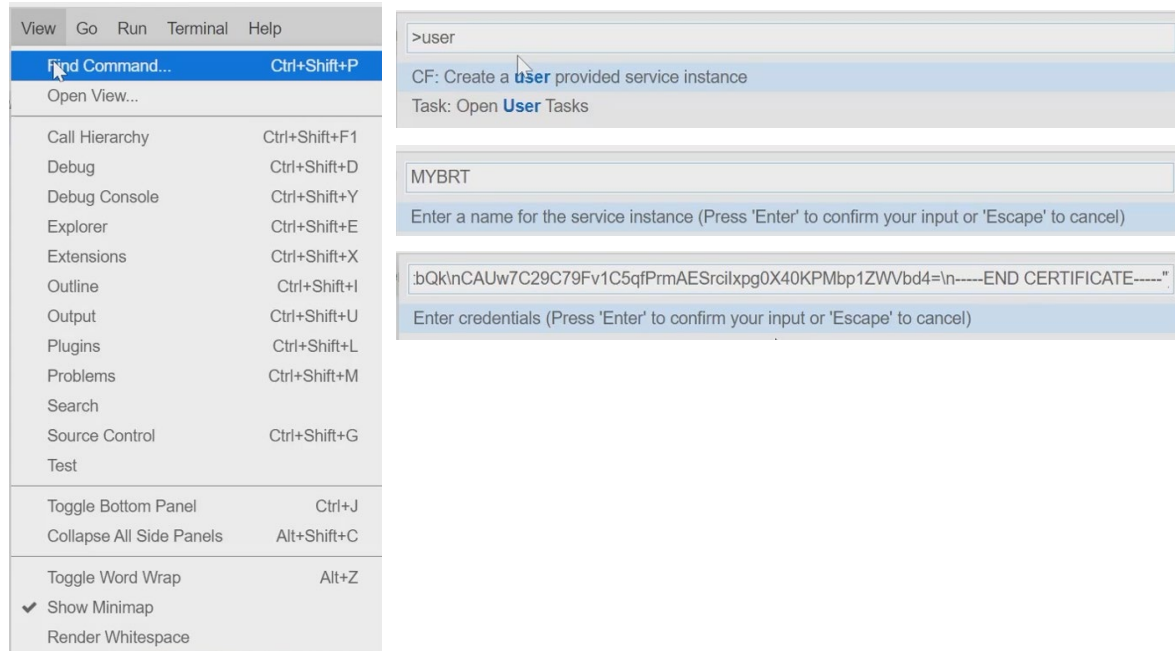
-
- The screenshot displays the 'All Instances' page in the SAP HANA Cloud Cockpit. The page header includes the SAP logo and navigation tabs for 'Instances' and 'Database Migrations'. A search bar at the top right allows searching by instance ID. Below the search bar, filters for 'Organization' (e6ed3ebetriebial) and 'Space' (dev) are visible. A table lists the instances, with columns for Status, Name, Type, Notifications, Memory, and Storage. Two instances are shown: 'EDS2021' (SAP HANA Database) and '191402126_EDS2021' (Data Lake IQ Component). A context menu is open for the 'EDS2021' instance, providing options to edit, copy, stop, upgrade, or delete the instance, as well as links to open the instance in the SAP HANA Cockpit, SAP HANA Database Explorer, or SQL Console.
- | Status | Name | Type | Notifications | Memory | Storage |
|----------------------|-------------------|--------------------------------|----------------|--------|---------|
| EDS2021 | | | | | |
| RUNNING | EDS2021 | SAP HANA Database | 1 | 30 GB | 120 GB |
| RUNNING | 191402126_EDS2021 | Data Lake IQ Component Enabled | | | 256 GB |
- Context Menu for EDS2021:
- Edit
 - Copy SQL Endpoint
 - Copy Instance ID
 - Copy Configuration
 - Stop
 - Upgrade
 - Delete
 - Open in SAP HANA Cockpit (To monitor and administer)
 - Open in SAP HANA Database Explorer (To develop and administer)
 - Open SQL Console (In SAP HANA Database Explorer)

- ```

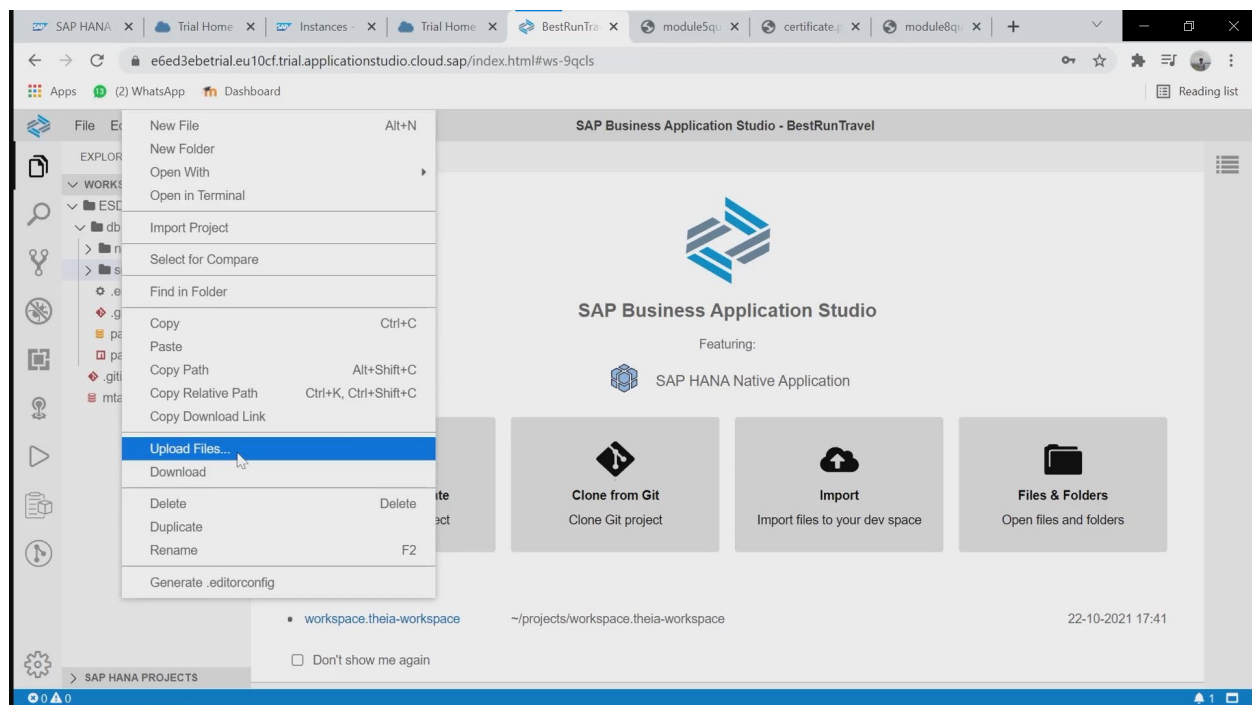
"host": "<HANA Cloud host>",
"port": "443",
"user": "<granting DB user>",
"password": "<password>",
"driver": "com.sap.db.jdbc.Driver",
"tags": [
 "hana"
],
"endpoint": "https://api.cf.sap.hana.ondemand.com",
"encrypt": true,
"validate_certificate": true,
"certificate": "-----BEGIN CERTIFICATE-----
\ nMIIDrzCCApegAwIBAgIQCDvgVpBCRRgHdWrJWZHHSjANBgkqhkiG9w0BAQUFADBh\ nMQswC
QYDVQQGEwJVUzEVMBMGA1UEChMMRGlnaUNlcnQgSW5jMRkwFwYDVQQLExB3\ nd3cuZGlnaWNl
cnQuY29tMSAwHgYDVQQDExdEaWdpQ2VydCBHbG9iYWwgUm9vdCBD\ nQTAeFw0wNjExMTAwMDA
wMDBaFw0zMTEwMTAwMDAwMDBaMGExCzAJBgNVBAYTAlVT\ nMRUwEwYDVQQKEwxEaWdpQ2VydC
BJbmMxGTAXBgNVBAsTEHd3dy5kaWdpY2VydC5j\ nb20xIDAeBgNVBAMTF0RpZ2lDZXJ0IEdsb
2JhbCBSb290IENBMiIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEA4jvhEXLeqKTT

```

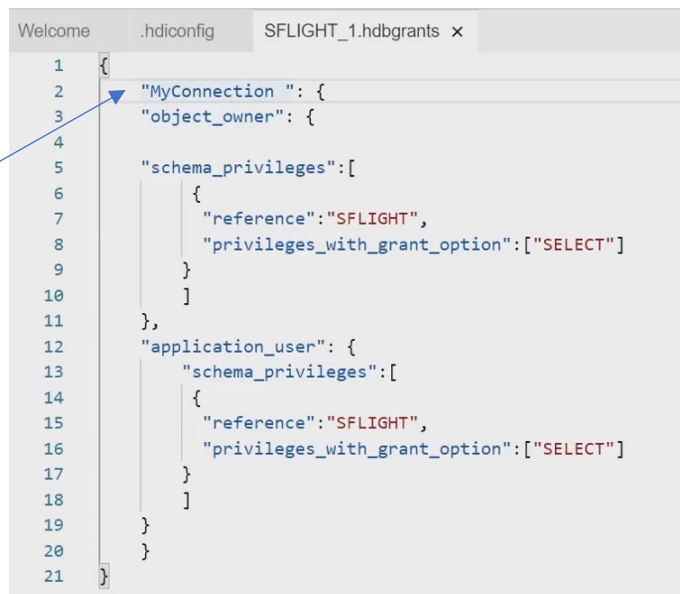
- Masuk ke view Pilih Find Command
- Cari user dan pilih create user provided
- Masukkan nama nya MYBRT
- Lalu pastekan file yang sudah kita edit tadi



- Upload file pada direktori scr dengan file [SFLIGHT.hdbgrants](#)

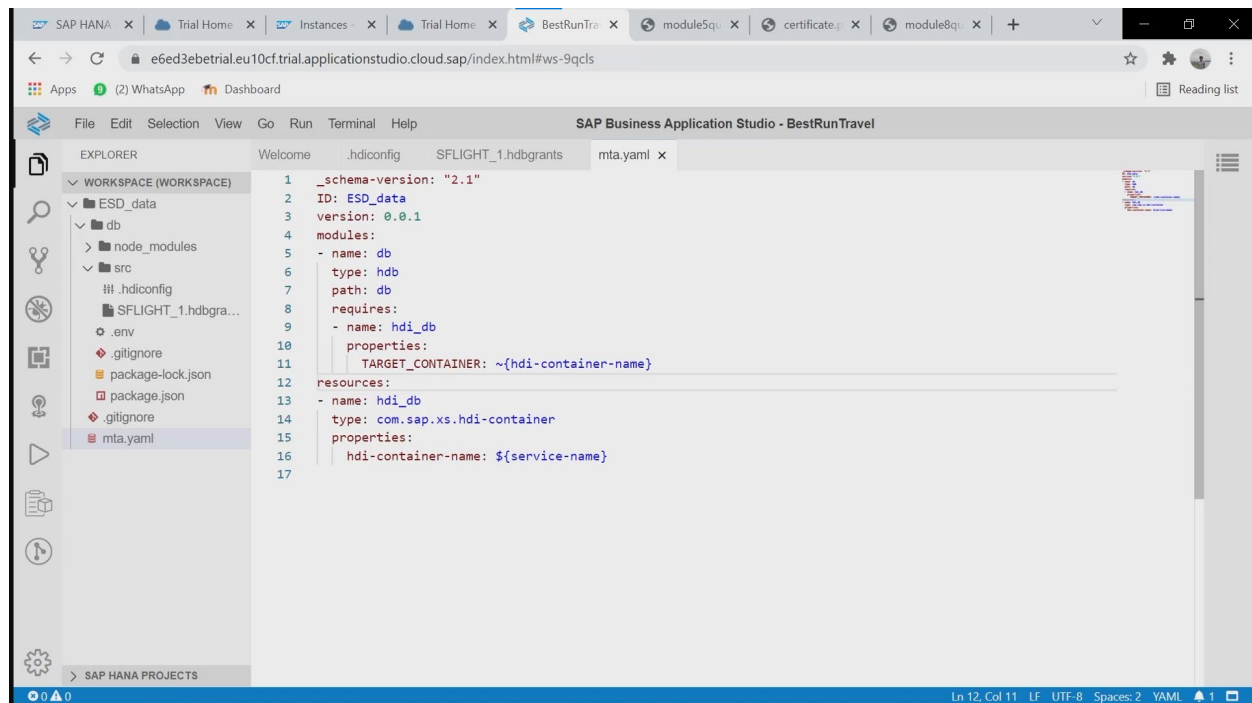


- Lalu ubah 'My Connection' menjadi MYBRT dan jangan lupa menyimpannya (ctrl+S)



```
1 {
2 "MyConnection": {
3 "object_owner": {
4
5 "schema_privileges": [
6 {
7 "reference": "SFLIGHT",
8 "privileges_with_grant_option": ["SELECT"]
9 }
10]
11 },
12 "application_user": {
13 "schema_privileges": [
14 {
15 "reference": "SFLIGHT",
16 "privileges_with_grant_option": ["SELECT"]
17 }
18]
19 }
20 }
21 }
```

- Lalu masuk ke file mta.yaml perhatikan spasi dikarenakan SAP sensitif



```
1 _schema-version: "2.1"
2 ID: ESD_data
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 resources:
13 - name: hdi_db
14 type: com.sap.xs.hdi-container
15 properties:
16 hdi-container-name: ${service-name}
17
```

- Ubah data yg perlu lalu klik gambar colokan pada MYBRT

