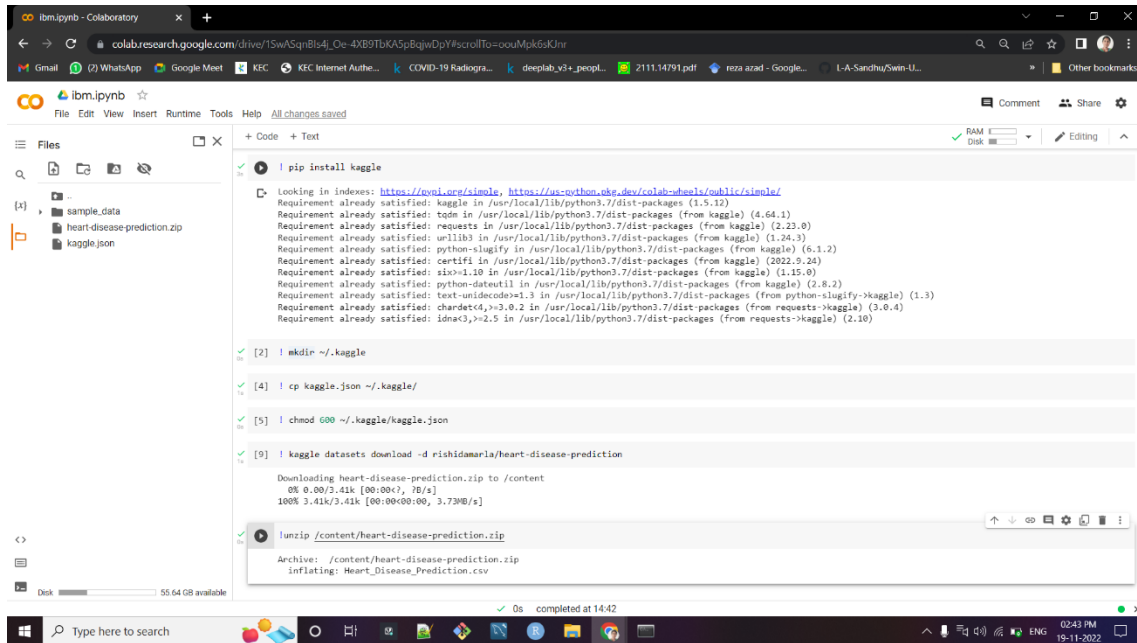


FETCH DATA FROM EXTERNAL API (KAGGLE API)



```
! pip install kaggle

Looking in indexes: https://pypi.org/simple, https://us-python.pkg.dev/colab-devs/colab/simple/
Requirement already satisfied: kaggle in /usr/local/lib/python3.7/dist-packages (1.5.12)
Requirement already satisfied: tqdm in /usr/local/lib/python3.7/dist-packages (from kaggle) (4.64.1)
Requirement already satisfied: requests in /usr/local/lib/python3.7/dist-packages (from kaggle) (2.23.0)
Requirement already satisfied: urllib3 in /usr/local/lib/python3.7/dist-packages (from kaggle) (1.24.3)
Requirement already satisfied: python-slugify in /usr/local/lib/python3.7/dist-packages (from kaggle) (6.1.2)
Requirement already satisfied: certifi in /usr/local/lib/python3.7/dist-packages (from kaggle) (2022.5.24)
Requirement already satisfied: aiohttp in /usr/local/lib/python3.7/dist-packages (from kaggle) (3.15.0)
Requirement already satisfied: python-dateutil in /usr/local/lib/python3.7/dist-packages (from kaggle) (2.8.2)
Requirement already satisfied: text-unidecode<1.3 in /usr/local/lib/python3.7/dist-packages (from python-slugify->kaggle) (1.3)
Requirement already satisfied: chardet<4,>=3.0.2 in /usr/local/lib/python3.7/dist-packages (from requests->kaggle) (3.0.4)
Requirement already satisfied: idna<3,>=2.5 in /usr/local/lib/python3.7/dist-packages (from requests->kaggle) (2.10)

[2] ! mkdir ~/.kaggle

[4] ! cp kaggle.json ~/.kaggle/

[5] ! chmod 600 ~/.kaggle/kaggle.json

[9] ! kaggle datasets download -d rishidamaria/heart-disease-prediction

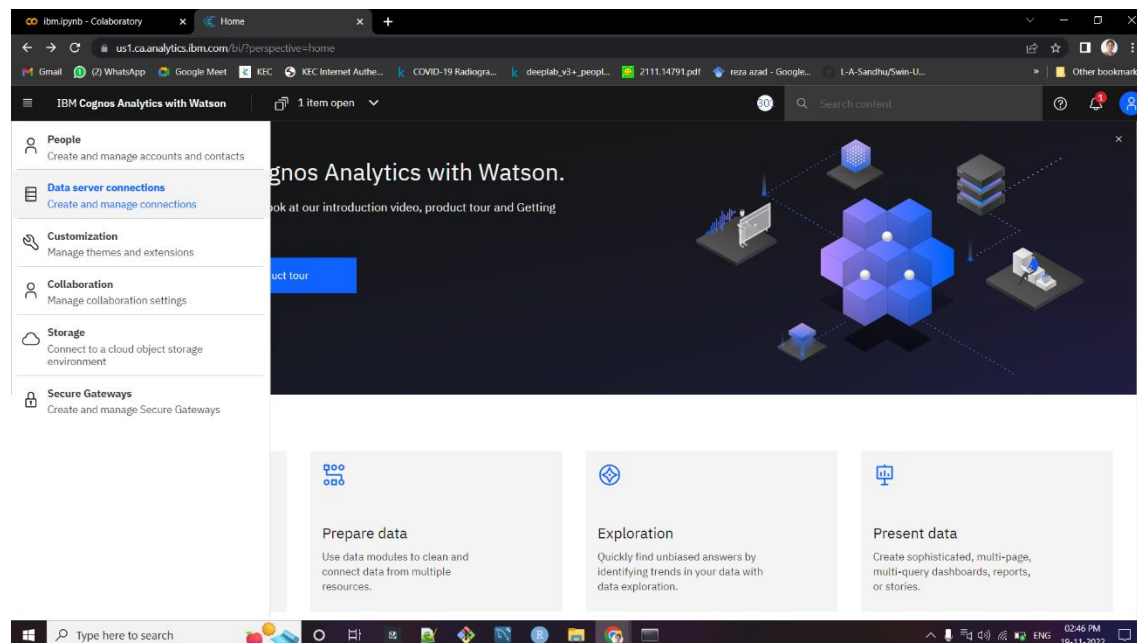
Downloading heart-disease-prediction.zip to /content
0% 0.00/3.41k [00:00<?, 7B/s]
100% 3.41k/3.41k [00:00:00:00, 3.73MB/s]

! unzip /content/heart-disease-prediction.zip

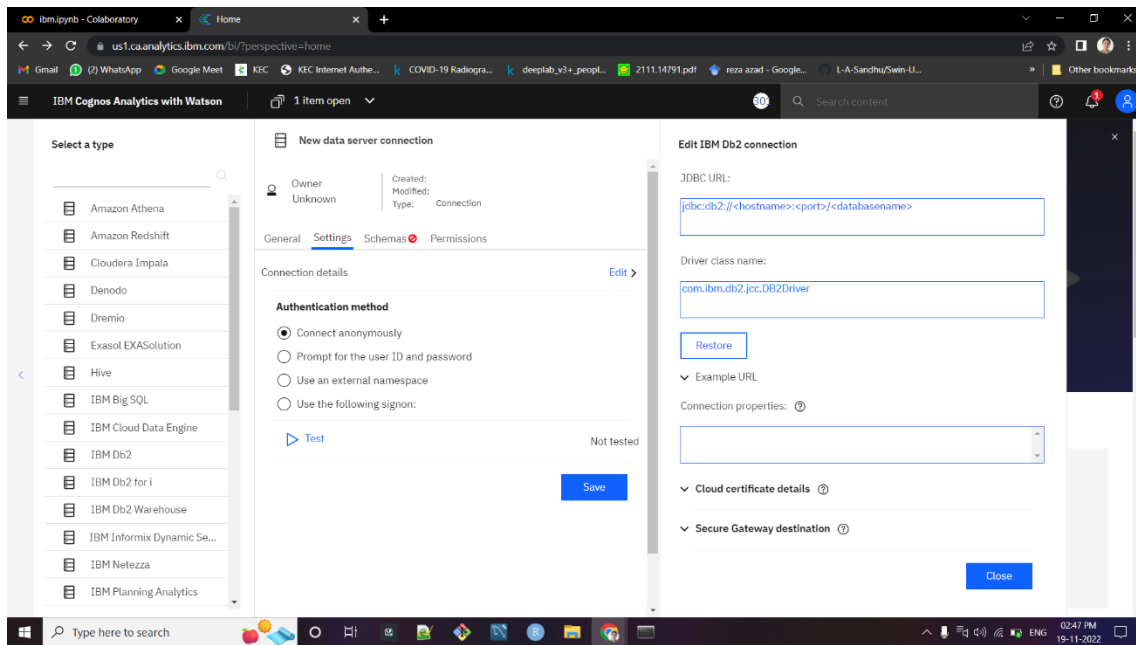
Archive: /content/heart-disease-prediction.zip
  inflating: Heart_Disease_Prediction.csv
```

IBM DB2 SERVICE CREATION AND DB2 CONNECTIVITY WITH COGNOS:

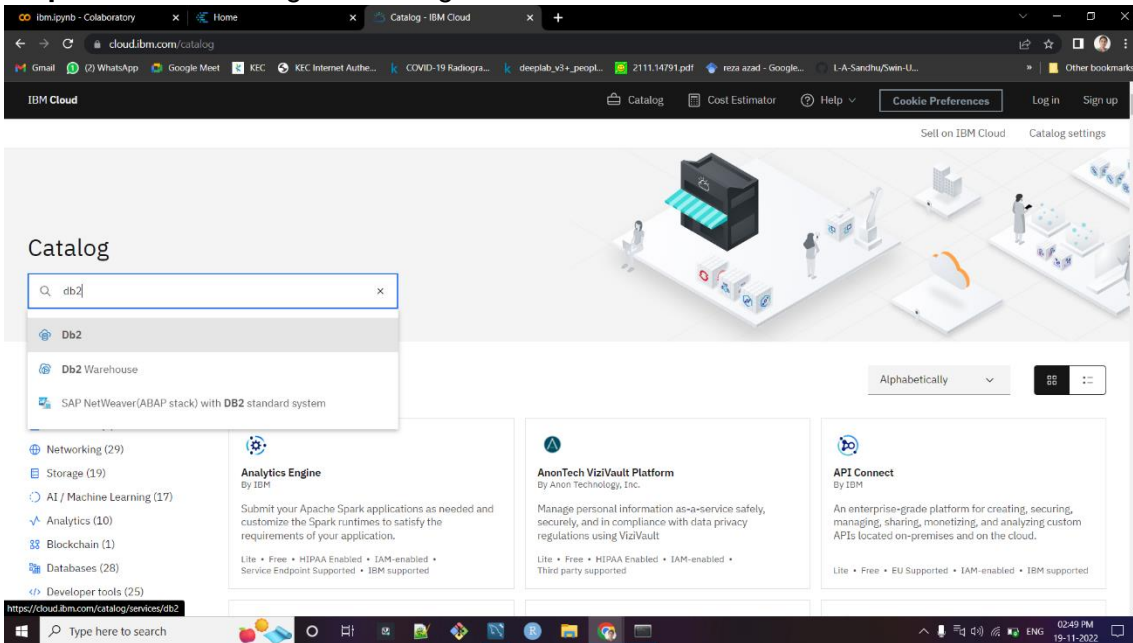
STEP 1: IN COGNOS WE HAVE TO PERFORM DATA SERVER CONNECTIONS



STEP 2: CONNECTION OF NEW DATA SERVER



Step 3: In IBM Cloud go to catalog search for db2.



STEP 4: CREATE A NEW DB2 SERVICE CONNECTION

The screenshot shows the IBM Cloud 'Catalog' page for the 'Db2' service. The page is titled 'Db2' and describes it as a 'fully managed, highly-performant relational data store running the enterprise-class Db2 database engine.' The 'Create' tab is active, and the 'Select a location' dropdown is set to 'Dallas (us-south)'. The 'Select a pricing plan' section shows two options: 'Life' (200 MB of data storage, 5 simultaneous connections, Shared multitenant system) and 'Standard' (Instance with flexible scaling of compute and storage, Base instance starts at 8 GB RAM x 20 GB Storage, HIPAA Enabled). The 'Standard' plan is selected. The 'Summary' panel on the right shows the service details: 'Location: Dallas', 'Plan: Standard', 'Service name: Db2-xb', and 'Resource group: Default'. A warning message states: 'This paid plan cannot be added to an IBM Cloud trial account. You can add a credit card to create a Pay-As-You-Go account. If a free plan for this service is available, you can choose to add it.' The 'Upgrade' button is visible.

Summary

Db2 [Estimate costs](#)

Location: Dallas
Plan: Standard
Service name: Db2-xb
Resource group: Default

Warning: This paid plan cannot be added to an IBM Cloud trial account. You can add a credit card to create a Pay-As-You-Go account. If a free plan for this service is available, you can choose to add it.

☐ I have read and agree to the following license agreements: [Terms](#)

[Upgrade](#)

[Add to estimate](#)

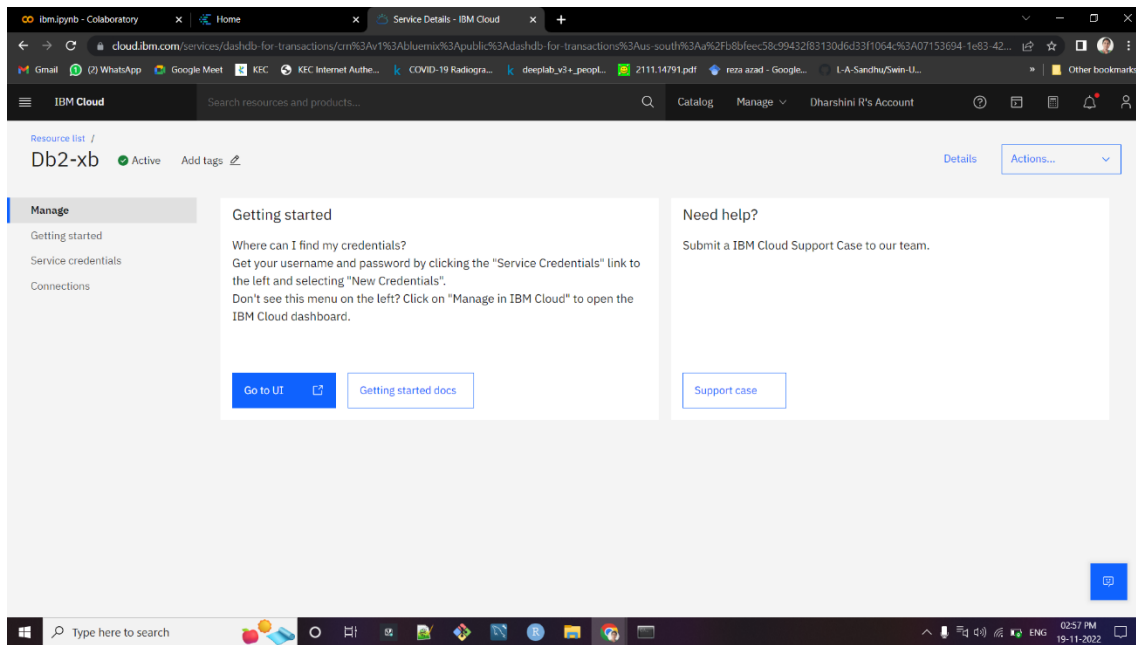
Step 5: From the Resource list select databases as Db2.

The screenshot shows the 'Resource list' page in the IBM Cloud console. The page displays a table of resources with columns: Name, Group, Location, Product, Status, and Tags. The 'Databases' category is expanded, showing a list of resources. The 'Db2-xb' resource is selected, and its details are shown in the table below. The status is 'Provision in progress...'. The 'Create resource' button is visible in the top right corner.

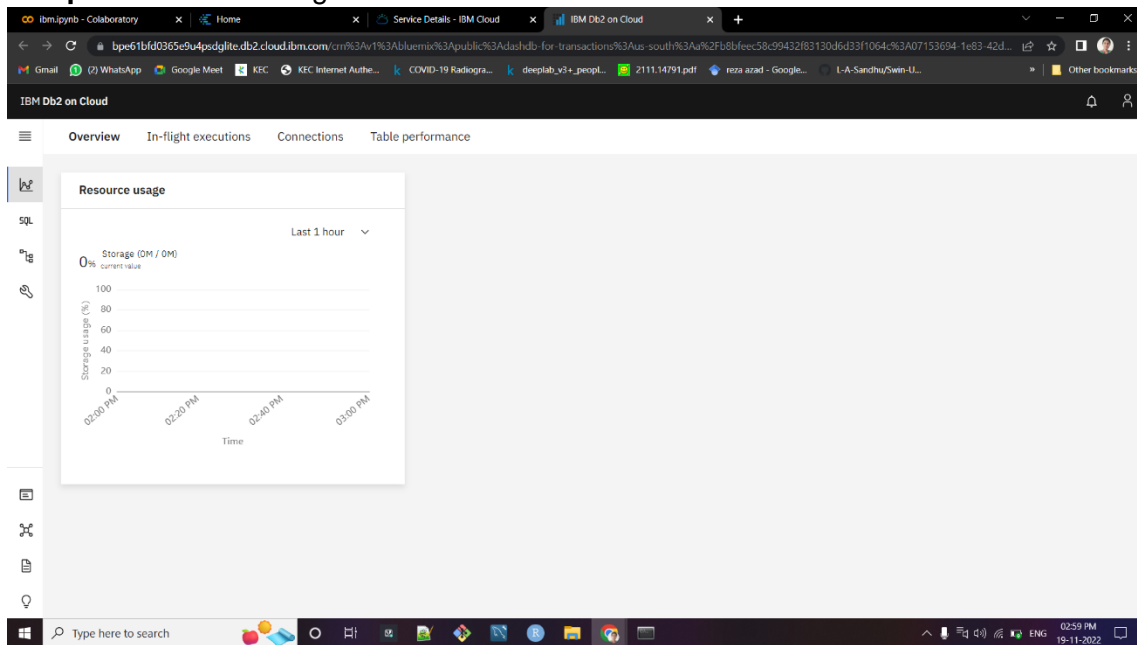
Resource list [Create resource](#)

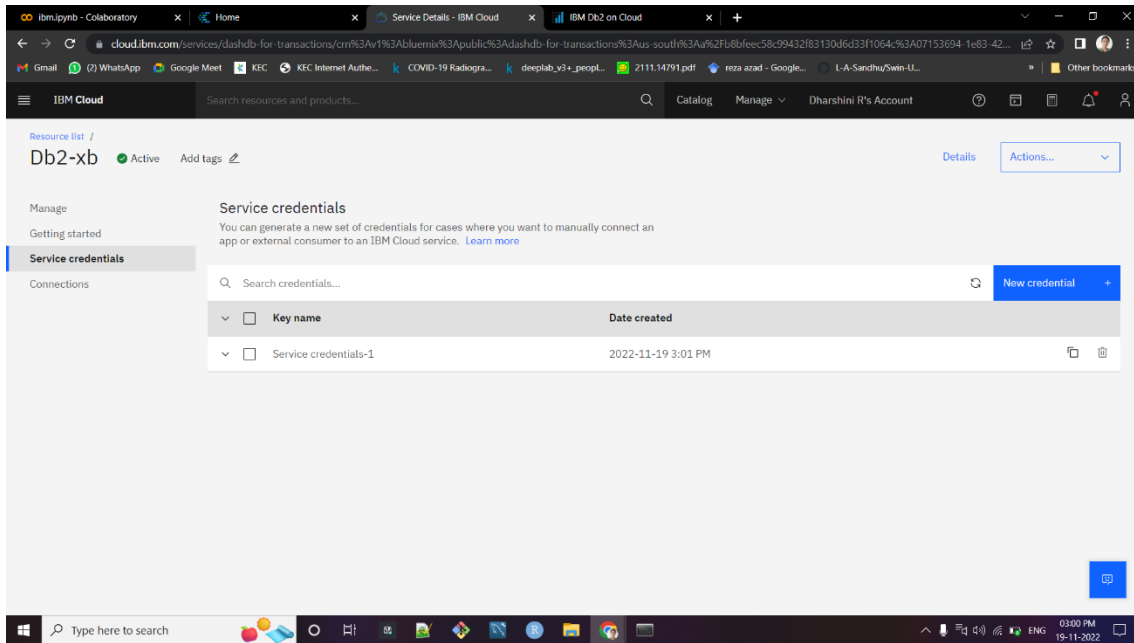
Name	Group	Location	Product	Status	Tags
Filter by name or IP address...	Filter by group or org...	Filter...	Q. Filter...	Q. Filter...	Filter...
Compute (0)					
Containers (0)					
Networking (0)					
Storage (0)					
AI / Machine Learning (0)					
Analytics (0)					
Blockchain (0)					
Databases (1)					
Db2-xb	Default	Dallas	Db2	Provision in progress...	
Developer tools (0)					
Logging and monitoring (0)					

Step 6: Click on goto UI to know resource usage.

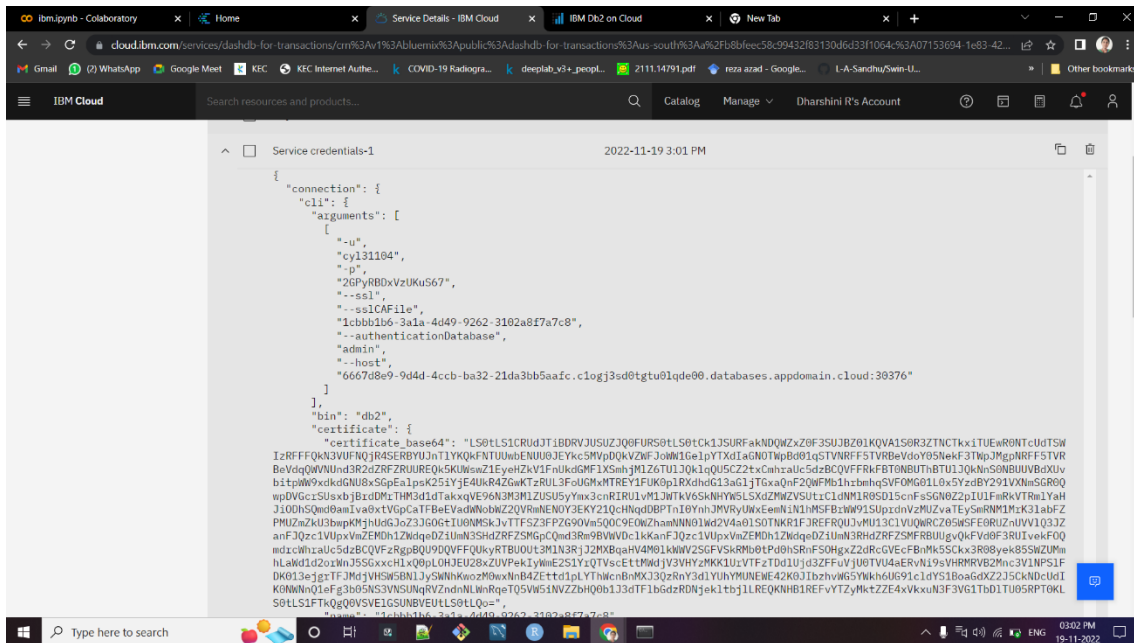


Step 7: Resource Usage of IBM Db2 on Cloud.

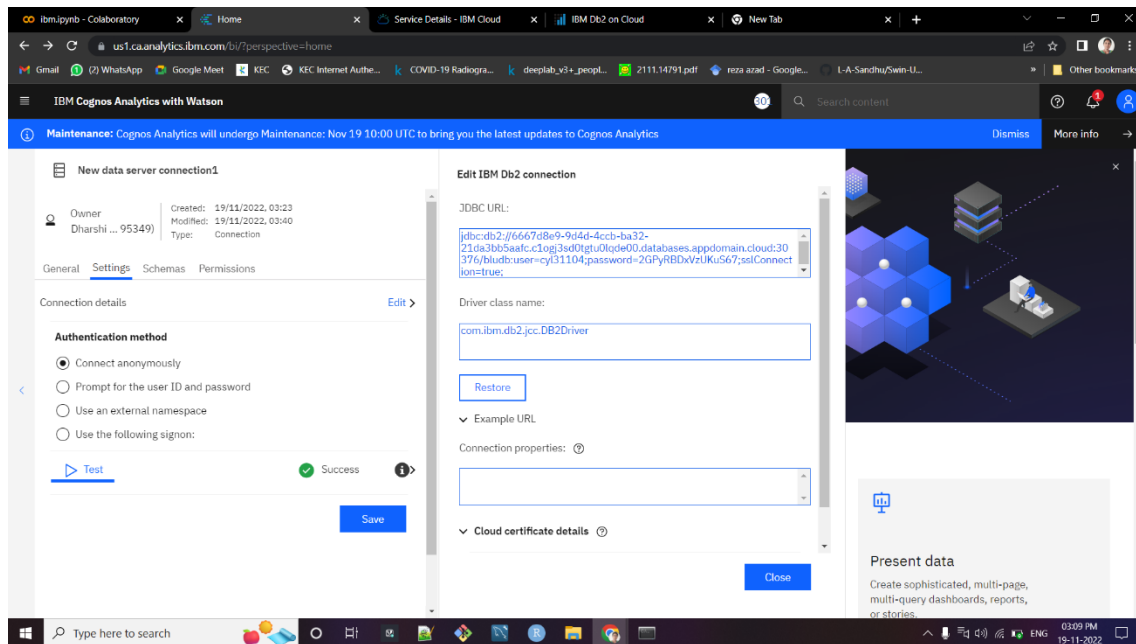




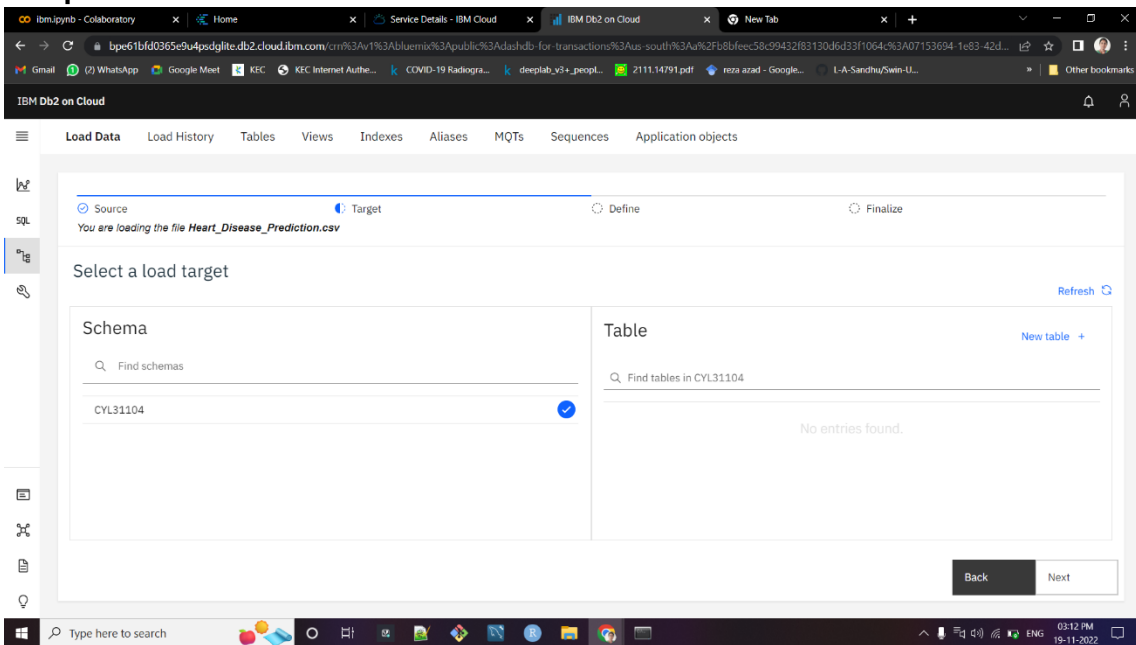
Step 9: Copy the jdbc url from the created service credential in IBM Cloud.
Connection.



STEP 10: DATA SERVER CONNECTION IS CREATED SUCCESSFULLY



Step 11: In IBM Db2 Select a schema and create a table.



Step 12: It shows the creation of table.

IBM Db2 on Cloud

Load Data Load History Tables Views Indexes Aliases MQTs Sequences Application objects

SQL

Export to CSV

	AGE SMALLINT	SEX SMALLINT	CHEST_PAIN_T... SMALLINT	BP SMALLINT	CHOLESTEROL SMALLINT	FBS_OVER_120 SMALLINT	EKG_RESULTS SMALLINT	MAX_HR SMALLINT	EXERCISE_AN... SMALLINT	ST_DEPRESSION DECIMAL(3, 1)
1	29	1	2	130	204	0	2	202	0	0.0
2	34	0	2	118	210	0	0	192	0	0.7
3	34	1	1	118	182	0	2	174	0	0.0
4	35	1	4	120	198	0	0	130	1	1.6
5	35	0	4	138	183	0	0	182	0	1.4
6	35	1	4	126	282	0	2	156	1	0.0
7	37	0	3	120	215	0	0	170	0	0.0
8	37	1	3	130	250	0	0	187	0	3.5
9	38	1	1	120	231	0	0	182	1	3.8
10	39	0	3	94	199	0	0	179	0	0.0
11	39	1	3	140	321	0	2	182	0	0.0
12	39	1	4	118	219	0	0	140	0	1.2

STEP 13: LOADING THE METADATA AND SUCCESSFULLY LOADED DATA IN COGNOS BY SERVER CONNECTION

IBM Cognos Analytics with Watson

Maintenance: Cognos Analytics will undergo Maintenance: Nov 19 10:00 UTC to bring you the latest updates to Cognos Analytics

Data server connections

Name	Modified
New data server connection1	19/11/2022 03:23
Weather Company	31/03/2022 20:44

New data server connection1

Owner: Dharshi ... 95349

Created: 19/11/2022, 03:23

Modified: 19/11/2022, 03:23

Type: Data Server

General Connections Permissions

Name Modified

Name	Modified
New data s ... connection1	19/11/2022 03:40

General Settings Schemas Permissions

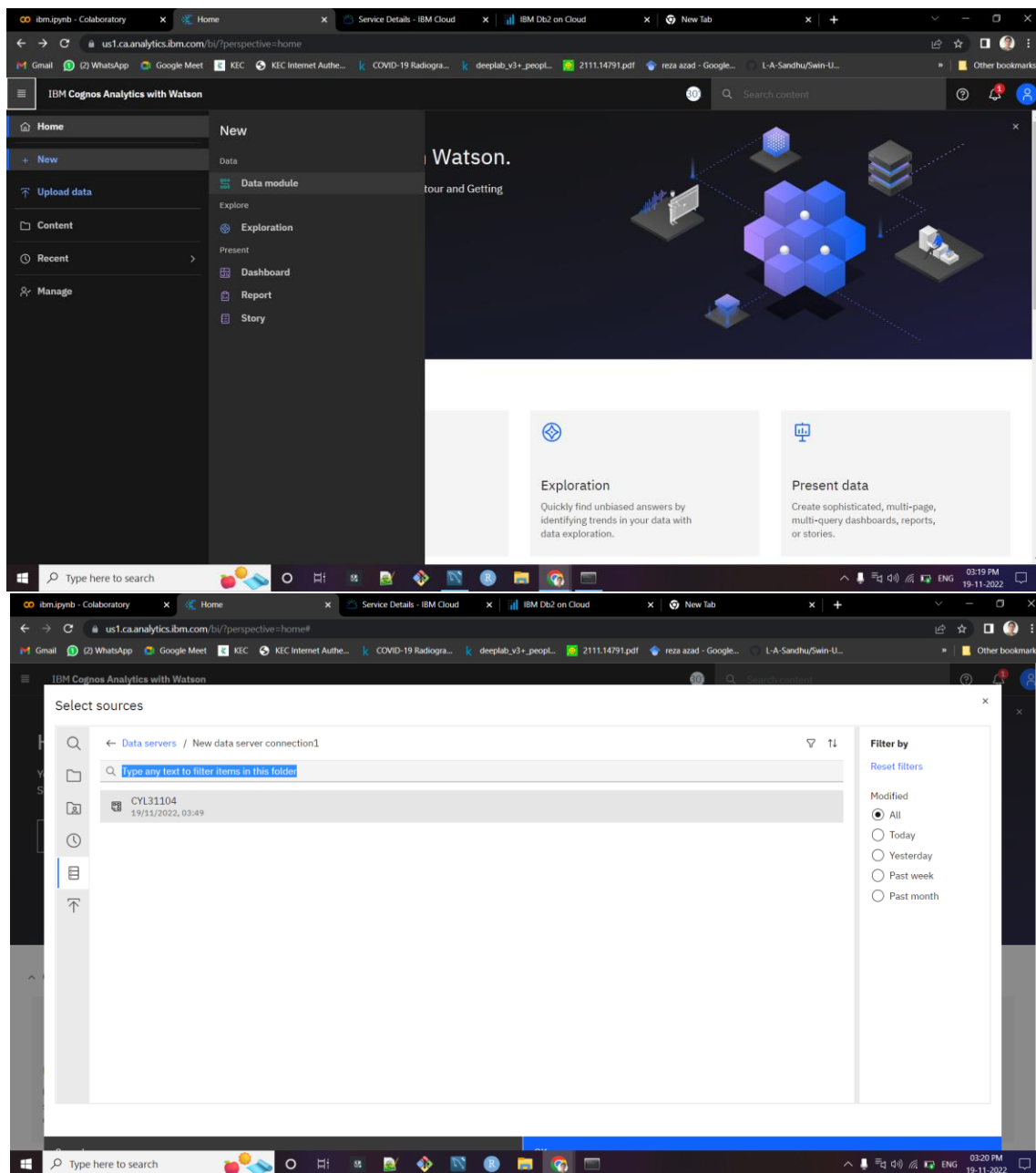
Status	Schema name	Tables loaded
<input type="radio"/>	AUDIT	
<input checked="" type="radio"/>	CYL31104	1 / 1
<input type="radio"/>	DB2GSE	
<input type="radio"/>	DB2INST1	
<input type="radio"/>	DSJOBMGR	
<input type="radio"/>	DSSCHED	
<input type="radio"/>	DSSHSV1	
<input type="radio"/>	NEWCD	

Show system schemas

CREATION OF DATA MODULE

Step 2: Choosing of dataset in data server connection in cognos.

Step 1: creation of Data Module.



Step 3: Data Module is created successfully.

The screenshot displays the IBM Cognos Analytics interface. On the left, a sidebar shows a 'New' menu with options like Age, Sex, Chest Pain Type, Bp, Cholesterol, Fbs Over 120, EKG Results, Max Hr, Exercise Angina, St Depression, Slope Of St, Number O...Is Fluro, and Thallium. The main area shows a table of patient data with columns: T1, Age, Sex, Chest Pain Type, Bp, Cholesterol, Fbs Over 120, and EKG Results. A 'Save as' dialog box is open, showing the name 'Heart disease prediction data module' and a list of folders in the 'Team content' area.

T1	Age	Sex	Chest Pain Type	Bp	Cholesterol	Fbs Over 120	EKG Results
70		1	4	130	322	0	2
67		0	3	115	564	0	2
57		1	2	124	261	0	0
64		1	4	128	263	0	0
74		0	2	120	269	0	2
65		1	4	120	177	0	0
56		1	3	130	256	1	2
59		1	4	110	239	0	2
60		1	4	140	293	0	2
63		0	4	150	407	0	2
59		1	4	135	234	0	0
53		1	4	142	226	0	2
44		1	3	140	235	0	2

Step 5: Representation of data module with data for heart disease prediction.

IBM Cognos Analytics with Watson

Heart disease pr ... data module

Search content

Properties

Grid

Relationships

Custom tables

T1	Age	Sex	Chest Pain Type	Bp	Cholesterol	Fbs Over 120	EKG Results
	70	1	4	130	322	0	2
	67	0	3	115	564	0	2
	57	1	2	124	261	0	0
	64	1	4	128	263	0	0
	74	0	2	120	269	0	2
	65	1	4	120	177	0	0
	56	1	3	130	256	1	2
	59	1	4	110	239	0	2
	60	1	4	140	293	0	2
	63	0	4	150	407	0	2
	59	1	4	135	234	0	0
	53	1	4	142	226	0	2
	44	1	3	140	235	0	2

Heart diseases...data module

Navigation paths

New

Age

Sex

Chest Pain Type

Bp

Cholesterol

Fbs Over 120

EKG Results

Max Hr

Exercise Angina

St Depression

Slope Of St

Number O...Is Fluro

Thallium

Heart Disease

Type here to search

03:21 PM 19-11-2022