

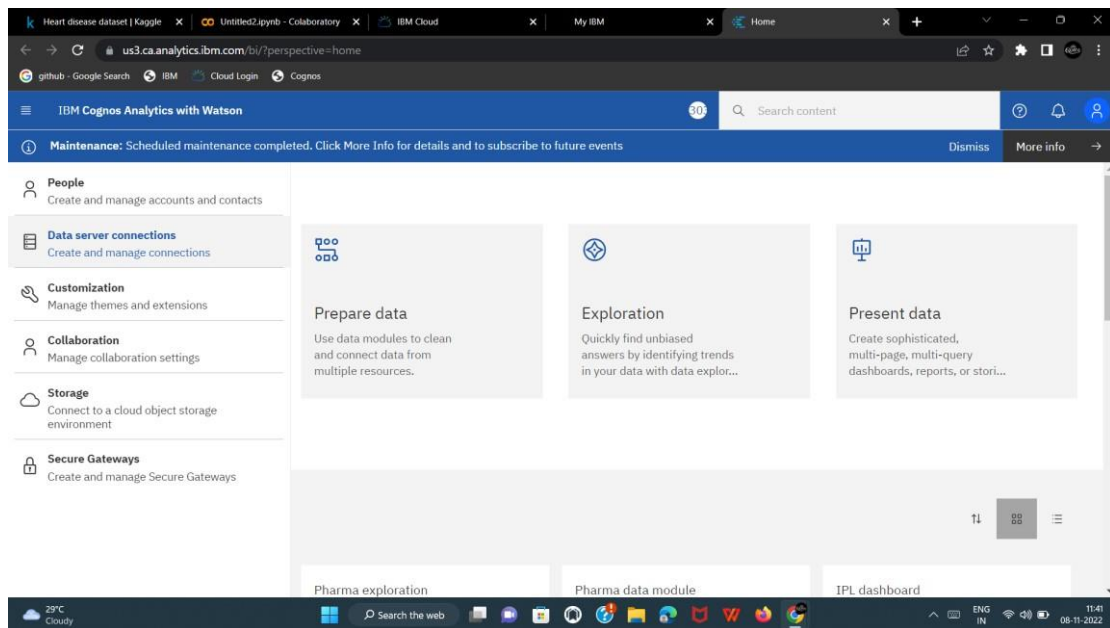
PROJECT DEVELOPMENT PHASE

Delivery of Sprint - 1

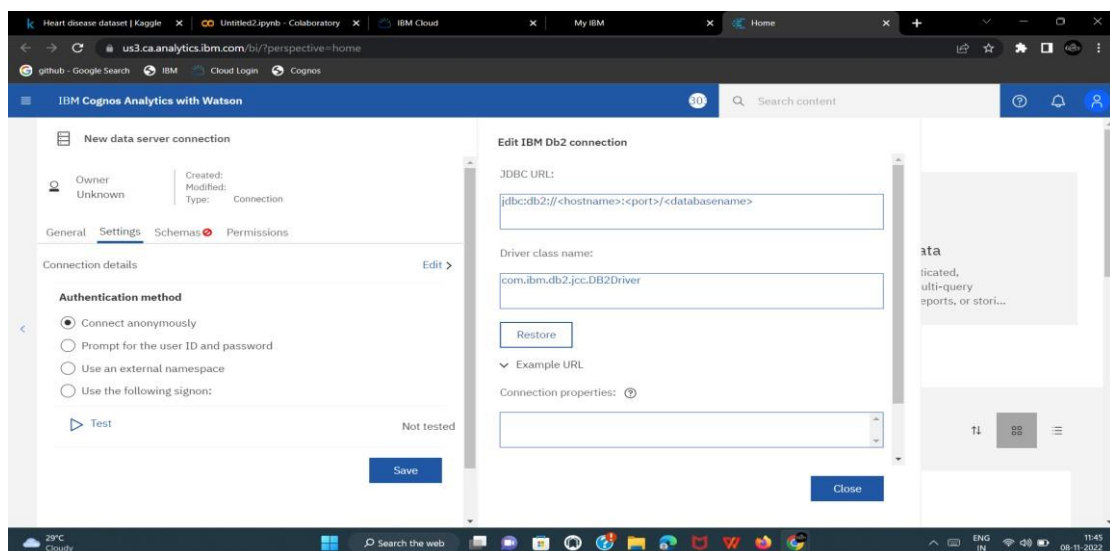
Team ID	PNT2022TMID36371
Project Name	VISUALIZING AND PREDICTING HEART DISEASE WITH AN INTERACTIVE DASH BOARD.

IBM DB2 service creation and DB2 connectivity with cognos:

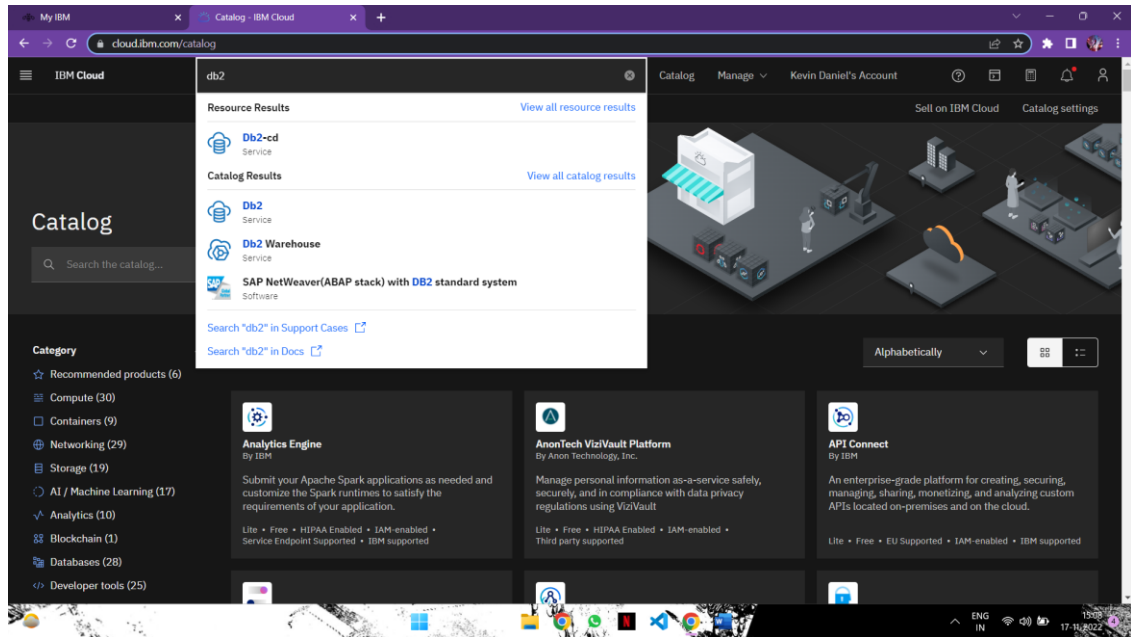
Step 1: In cognos we have to perform data server connections.



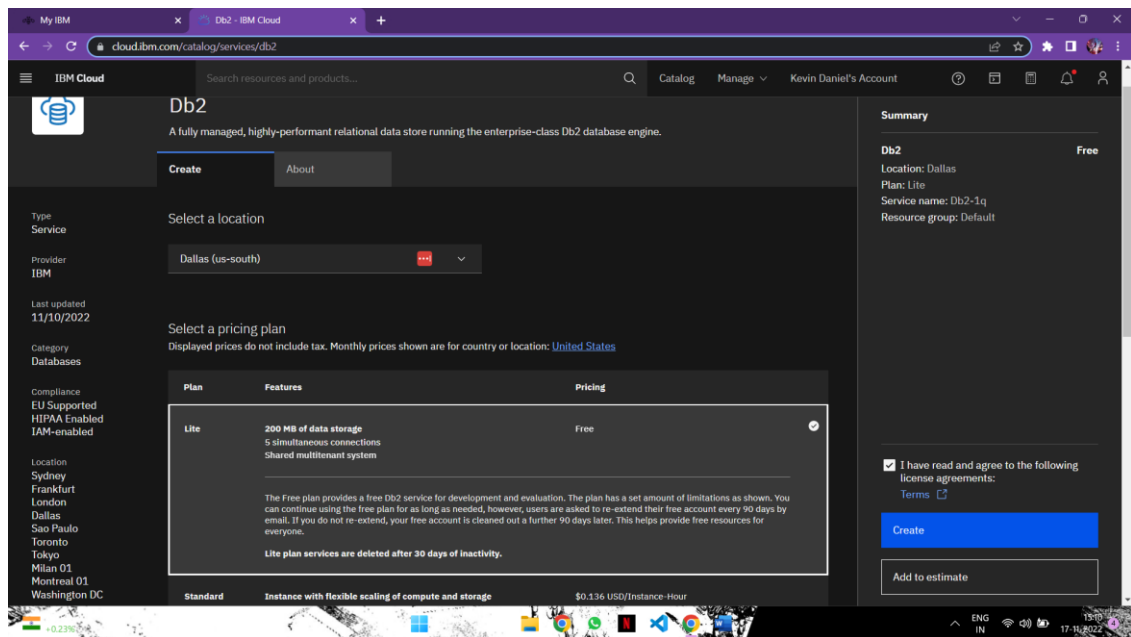
STEP 2: Connection of New Data Server



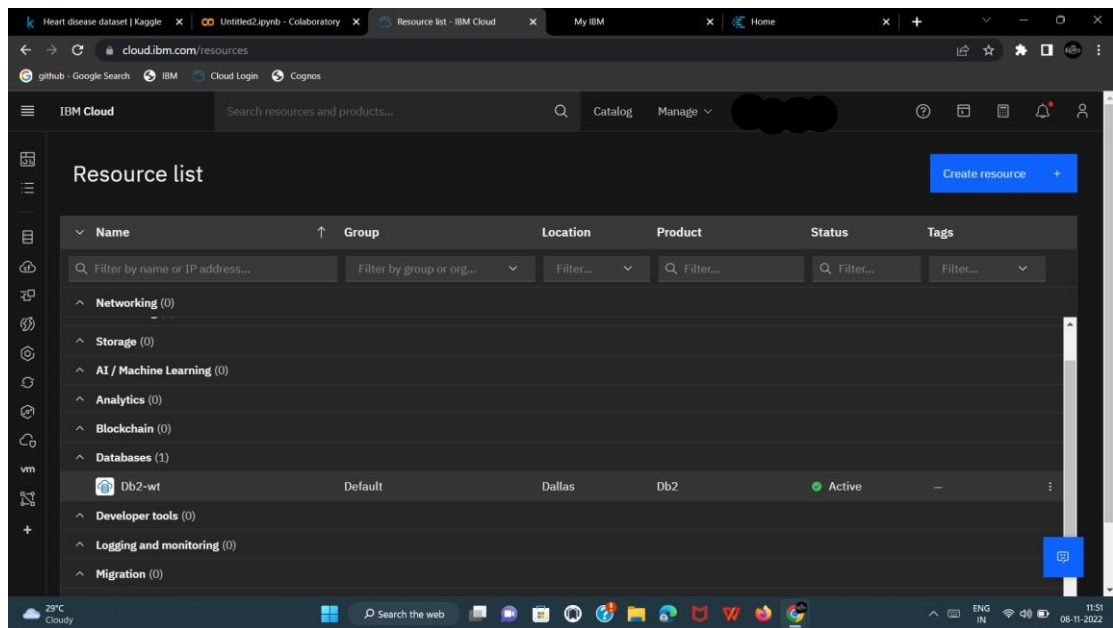
STEP 3: In IBM cloud go to catalog and search for db2.



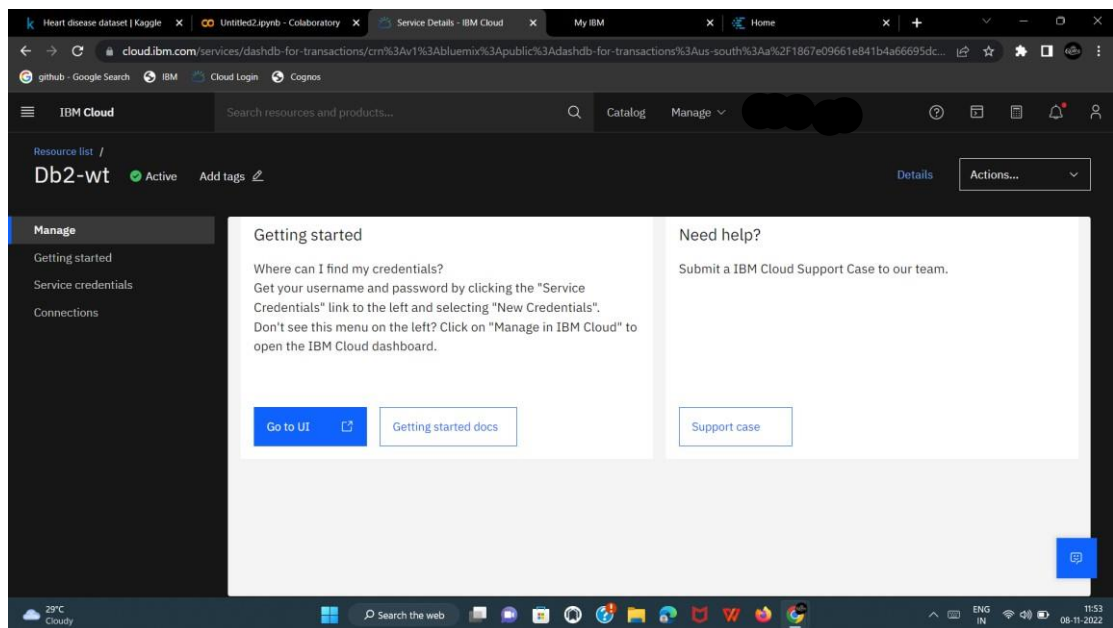
STEP 4: Create a new db2 connection.



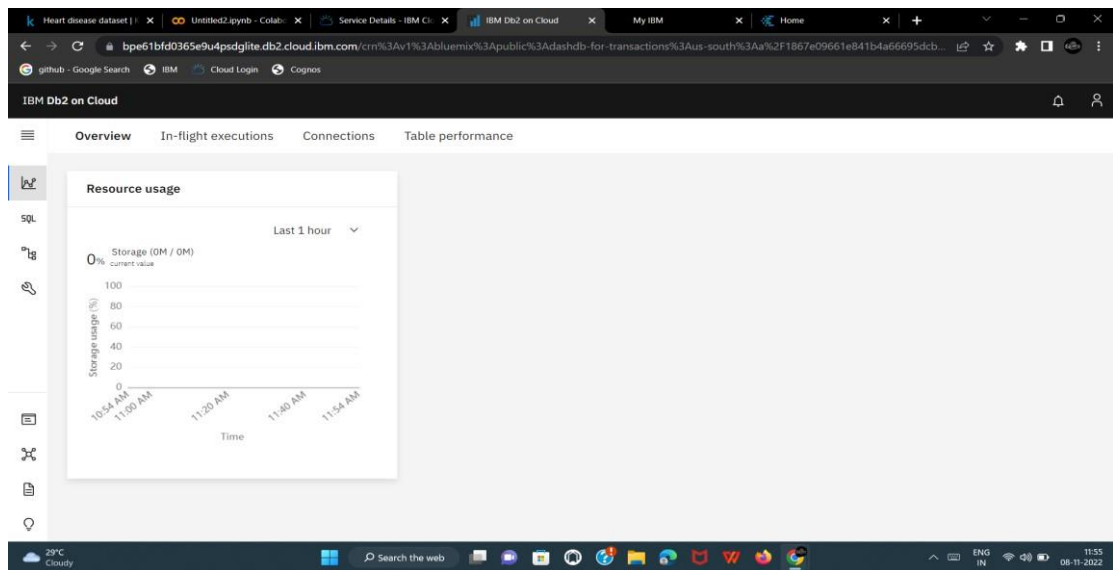
STEP 5: From the resource list select database as Db2.



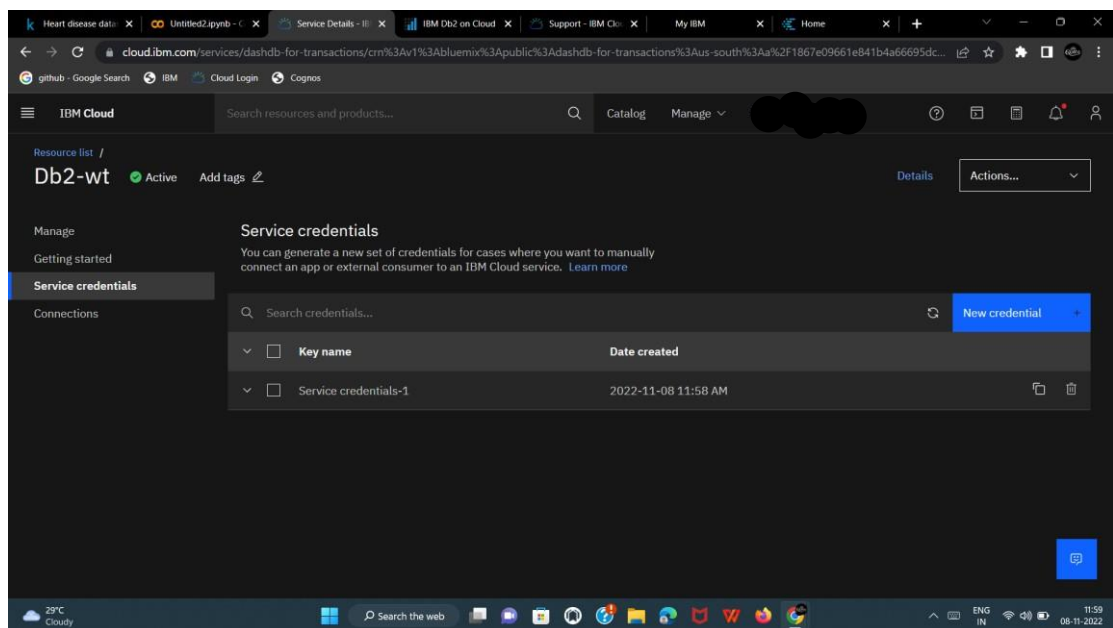
STEP 6: Click on Go to UI to know resource usage.



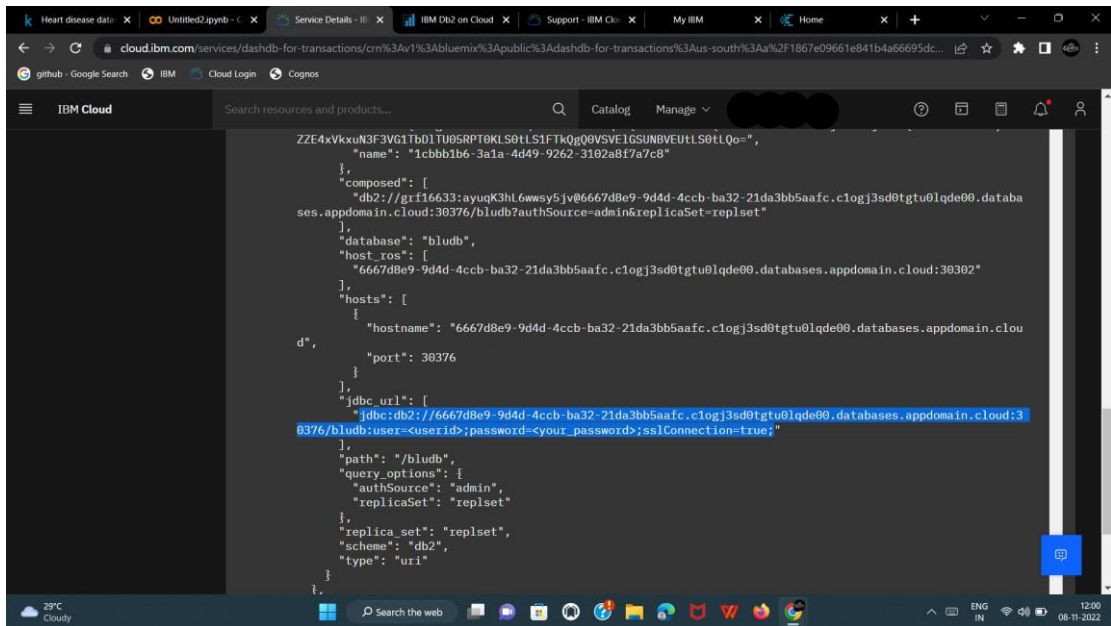
STEP 7: Resource usage of IBM Db2 on cloud.



STEP 8: Creation of new Service Credential.

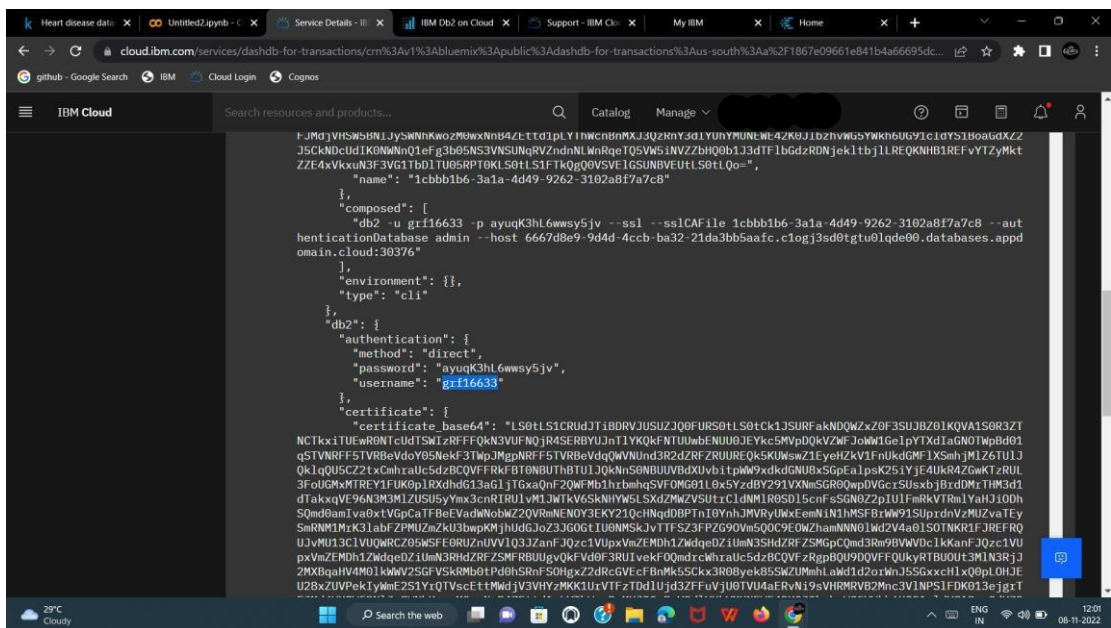


STEP 9: Copy the JDBC url from the created service credential in IBM Cloud.



```
ZZE4xVkuN3F3VG1Tb01TU05RPT0KLS0tLS1fTk0g00VSVe1GSUNBVEUtlS0tLQo=",
  "name": "1cbbb1b6-3a1a-4d49-9262-3102a8f7a7c8",
  "composed": [
    {
      "db2": "grf16633:ayuqK3hL6wmsy5jv/6667d8e9-9d4d-4ccb-ba32-21da3bb5aafc.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud:30376/bludb?authSource=admin&replicaSet=replset"
    }
  ],
  "database": "bludb",
  "host_ros": [
    {
      "6667d8e9-9d4d-4ccb-ba32-21da3bb5aafc.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud:30376"
    }
  ],
  "hosts": [
    {
      "hostname": "6667d8e9-9d4d-4ccb-ba32-21da3bb5aafc.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud",
      "port": 30376
    }
  ],
  "jdbc_url": [
    {
      "jdbc_url": "jdbc:db2://6667d8e9-9d4d-4ccb-ba32-21da3bb5aafc.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud:30376/bludb:user=<userid>;password=<your_password>;sslConnection=true;"
    }
  ],
  "path": "/bludb",
  "query_options": {
    "authSource": "admin",
    "replicaSet": "replset"
  },
  "replica_set": "replset",
  "scheme": "db2",
  "type": "uri"
},
{
}
```

STEP 10: Copy the username and paste it in JDBC url in cognos for creating data server connection.



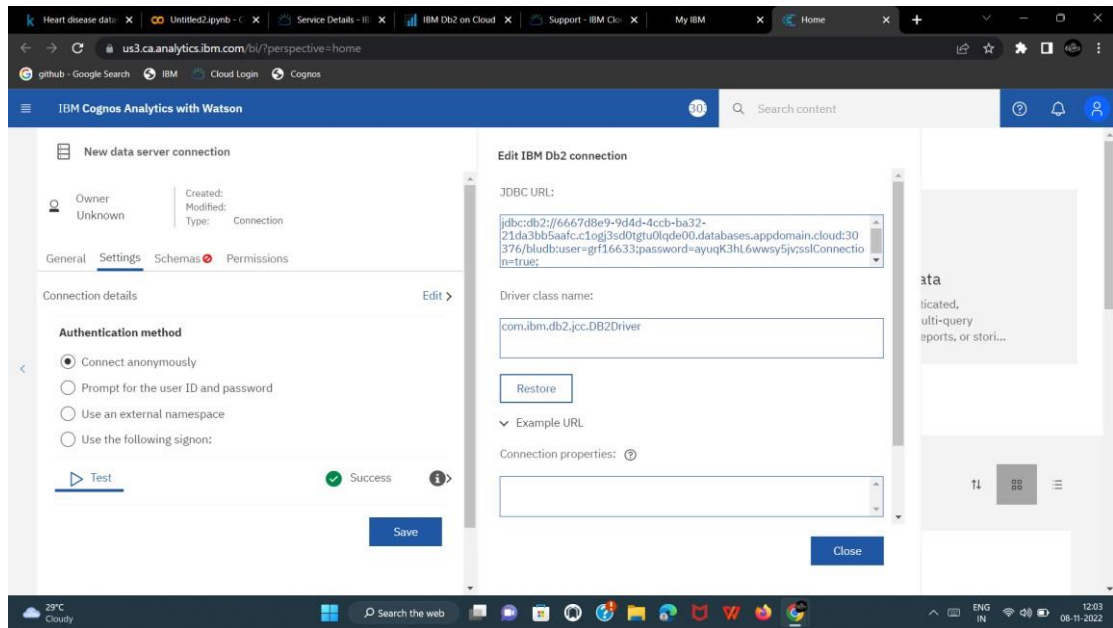
```
FJMdjVH5WbUJ1jySWNkwoZm0xNnB4ZttdDplYInwcnBnMXJ3QZkny5d1YUNYMUWLE4ZKJj1bzHwG5YKkH6UGV1c1dYS1UoaGdXZJ5CkNdUdIK0NnNnQ1efg3b05NS3VNSUNgRVZndnNLWnRqeIQSVW5iNVZZbHq0b133dTF1bGdzRDNjekltb1JLREQNHB1REFvYTYzYmktZZE4xVkuN3F3VG1Tb01TU05RPT0KLS0tLS1fTk0g00VSVe1GSUNBVEUtlS0tLQo=",
  "name": "1cbbb1b6-3a1a-4d49-9262-3102a8f7a7c8",
  "composed": [
    {
      "db2": "grf16633 -p ayuqK3hL6wmsy5jv --ssl --sslCAfile 1cbbb1b6-3a1a-4d49-9262-3102a8f7a7c8 --authenticationDatabase admin --host 6667d8e9-9d4d-4ccb-ba32-21da3bb5aafc.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud:30376"
    }
  ],
  "environment": {},
  "type": "cli"
},
{
  "db2": {
    "authentication": {
      "method": "direct",
      "password": "ayuqK3hL6wmsy5jv",
      "username": "grf16633"
    },
    "certificate": {
      "certificate_base64": "LS0tLS1CRUdJTiB0dXJUSU9fUR50tLS0tck1JSURFakNDQWZzZGF3S0J0Z01KQVA1S0R3ZTNTCTkxiTUeWR0NTc0dG1SWzRFFQK3b05NS3VNSUNgRVZndnNLWnRqeIQSVW5iNVZZbHq0b133dTF1bGdzRDNjekltb1JLREQNHB1REFvYTYzYmktZZE4xVkuN3F3VG1Tb01TU05RPT0KLS0tLS1fTk0g00VSVe1GSUNBVEUtlS0tLQo="
    }
  }
},
{
}
```

STEP 10: Copy the password and paste it in JDBC url in cognos.

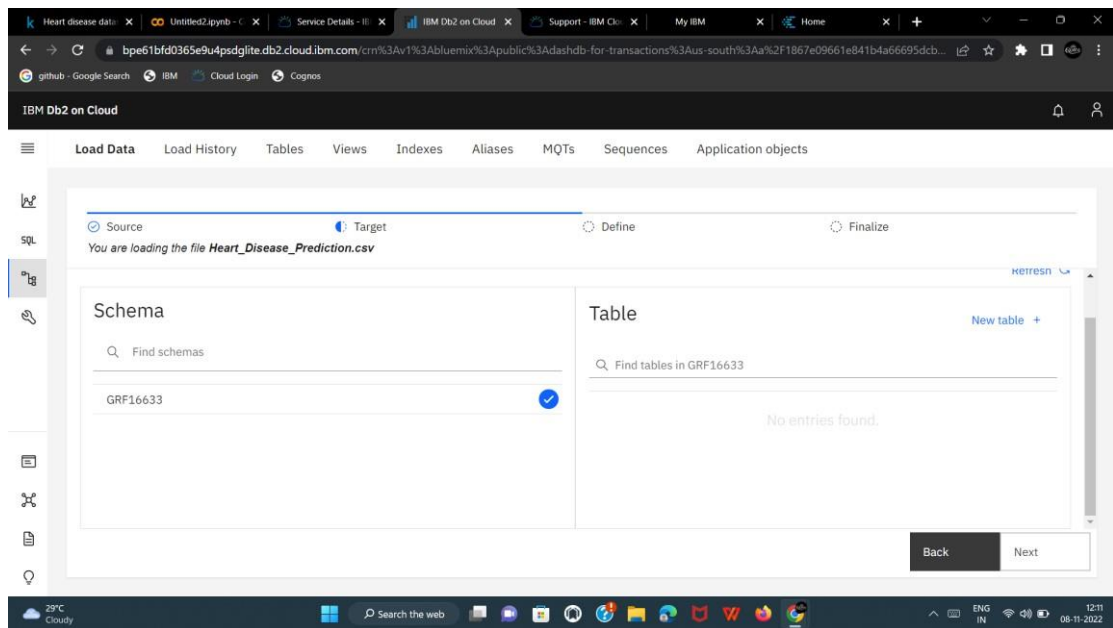
The screenshot shows the IBM Cloud console interface. The main content area displays a JSON configuration for a database connection. The configuration includes a name, a composed object with environment and type details, and a db2 object with authentication and certificate information. The connection is successfully established, as indicated by the status bar at the bottom.

```
FJMOjVHSW5B8LjYsWNNkwoZM6xNnB4ZtEtDpLYIhWcnBnMXJ3QZKnyJdIYUNYhWME42K0J1BzhVWGSYMKH6U631cIdYS180aGdXZ2
J5CKNDcdIK6MNNnQ1efg3B05NS3VNSUNQVZndnNLmRqetQ5VMSINVZZBH00b1J3dTF1bGdzRDNjek1tbtj1LREKQNH1REFvYtZyMkt
ZZE4xVkuX3F3VG1tD01TU05RPT9KLS01LS1FtQg00VSVE1GSUNBVEuTL50tLQo=",
  "name": "1cbbb1b6-3a1a-4d49-9262-3102a8f7a7c8"
},
{
  "composed": {
    "db2": {
      "method": "direct",
      "password": "ayugK3h16wswy5jv",
      "username": "grf16633"
    },
    "certificate": {
      "certificate_base64": "LS0tLS1CRUdJTiB0RVJUSUZJQ0FURSB0LS0tck1JSURfakNDQWZxZ0F3BUZ0KQVA1S0R3ZT
NCTkx1TUEwR0NlcnRFFQkN3VUFNbjR4SERBYUJnTlYKQkFNTUwBENU09JEYkc5MvpDQkVWFJoMm1GeIpY1XdIaGN0TWpBd01
qSTVNRFF5TVRBeVdoY05NeKf3TwpJgPnRFF5TVRBeVdQWVNUnd3R2dRFRZRUUREQK5KUswZ1EYeHZKv1FnUkdGNF1XSahJm1Z6TUIJ
Qk1q0USCZ21xChraUe5dzBQVFFRAB10MBU1h3TUI1JQAnS8NBUBU0dXUvbi1pKw9xdKdNUB5SgEa1peQ5Y1Y4U0R4ZGwKT2RUL
3FoUGMKTREY1FUK0p1RXdhG13aG1jTGxa0nF2QWfMb1htbmhgSVF0MG0110xSYzd0Y291VXNmSGR00pDVCxSUaxbjbJcd0Mw1TM3d1
dTakqVE96N3M3M1ZUSUSyYmx3cnR1RU1vM1JWtkV6SKNHYWLSxdZMwZVSuttc1dNM1R8S015cnfSGN02Zp1U1FmRkVtRm1YaHJ100h
SQnd8amIva9xtVgPcaTFBeEVadWnobwZ2OVmNENOV3EKY21QcHNdqDBPTn10YnhJMVRYUWxEemNi1hMSFBW91SUpdrdnVzMUZvaTey
SmRNM1M1K31abfZPMUZmZkU3bwpKMj1hUdG3oZ3JG0GtIU0NMSKjVtTF5Z3FPZG9V0m500C9E0WZhamNN01Wd2V4a01S0TNKR1FJREFRQ
UJvMU13C1VUQWRCZ05WSF0R0ZnUVV1Q3J3ZanFJQzc1VUpXVmZEMdh1ZwdqDZiUmN3SdRFRZSMGpCQnd3Rm9BWWVdc1kKanfJQzc1VU
pxVmZEMdh1ZwdqDZiUmN3RhdRFRZSMFRBUUgvQkFVd0F3RUIveKf0QmdrcWhraUc5d2BCQVFRgpbBQ9QdQVQkYRtBU0U1M1N3RjJ
2MXBqaHV4M01kMwV2SGFVSKRMB0tPd0hSRnF50HgxZ2dRcGVEcFBNM5SCKx3R08yK85SWZMmhlLaWd1d2o1WnJ5S6xH1x0pL0HJE
U28xZUVPekIYmE251YrQTVscEttMkdjV3VHYzMKK1UzVTFzTd1Ujd3ZFFuVjU0TVU4aERvN19sVHRMRVB2Mnc3V1NPS1FDK013eJgrT
"
```

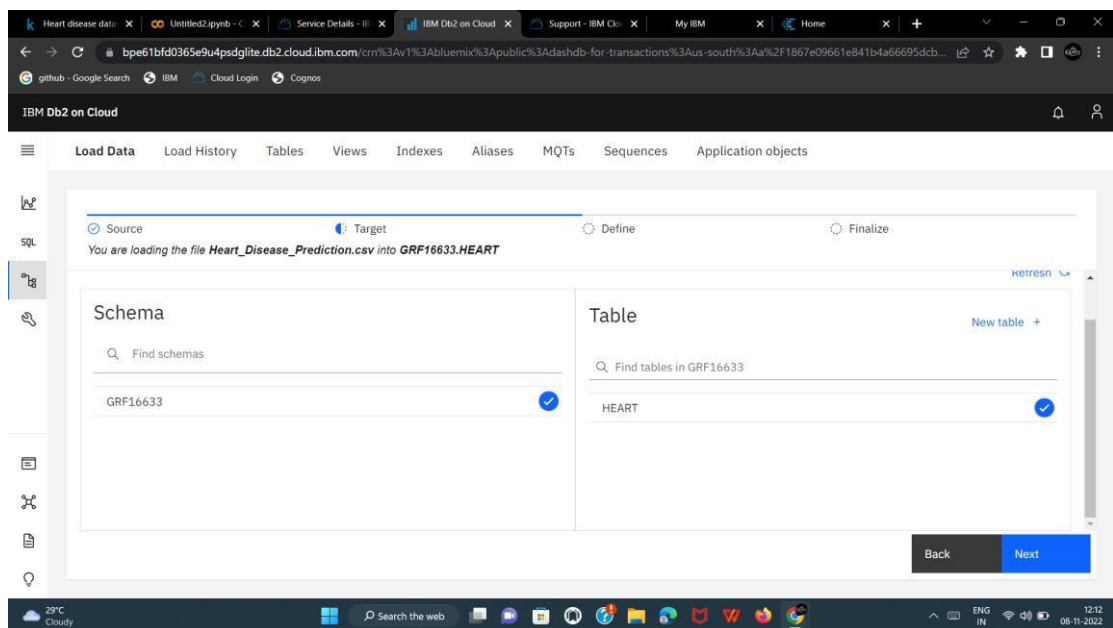
STEP 11: Data Server Connection is created successfully.



STEP 12: In IBM Db2 Select a schema and create a table.



STEP 13: Schema and table has been created.



STEP 14: The creation of table is shown below:

Source Target Define Finalize

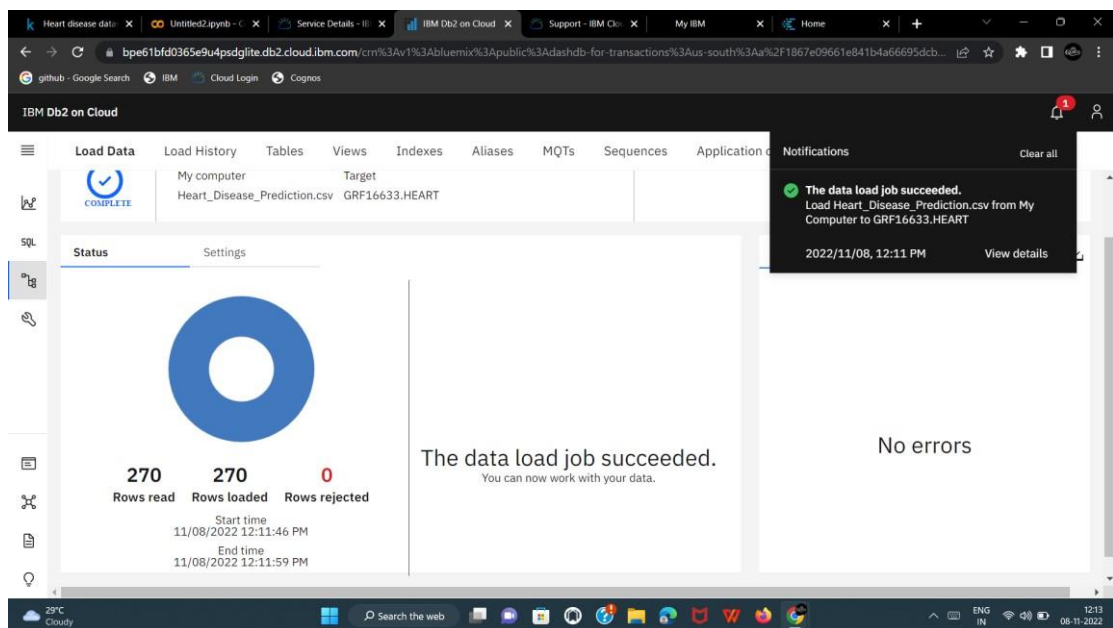
You are loading the file **Heart_Disease_Prediction.csv** into **GRF16633.HEART**

Code page (character encoding): 1208 (UTF-8) Separator: Header in first row: Time & date format: Detect data types:

	AGE SMALLINT	SEX SMALLINT	CHEST_PAIN_TYPE SMALLINT	BP SMALLINT	CHOLESTEROL SMALLINT	FBS_OVER_120 SMALLINT	EKG_RESULTS SMALLINT	MAX_HR SMALLINT
1	70	1	4	130	322	0	2	109
2	67	0	3	115	564	0	2	160
3	57	1	2	124	261	0	0	141
4	64	1	4	128	263	0	0	105
5	74	0	2	120	269	0	2	121
6	65	1	4	120	177	0	0	140
7	56	1	3	130	256	1	2	142
8	59	1	4	110	230	0	2	142

Back Next

STEP 15: The data has been loaded successfully in Db2.



STEP 16: The below table represents the data present in our Dataset.

GRF16633.HEART

	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
1	29	1	2	130	204	0	2	202	0
2	34	0	2	118	210	0	0	192	0
3	34	1	1	118	182	0	2	174	0
4	35	1	4	120	198	0	0	130	1
5	35	0	4	138	183	0	0	182	0
6	35	1	4	126	282	0	2	156	1
7	37	0	3	120	215	0	0	170	0
8	37	1	3	130	250	0	0	187	0

STEP 17: Loading of metadata and successfully loaded data in cognos by server connection.

Heart Disease Prediction

Owner: Rajasri (... 3244f6)

Created: 08/11/2022, 12:33 AM
Modified: 08/11/2022, 12:33 AM
Type: Data Server

General Connections Permissions

Name	Modified
Heart Disease Prediction	08/11/2022 12:33 AM

Heart Disease Prediction

General Settings Schemas Permissions

Status	Schema name	Tables loaded
<input type="radio"/>	ERRORSCHEMA	
<input checked="" type="radio"/>	GRF16633	1 / 1
<input type="radio"/>	HEALTHMETRICS	
<input type="radio"/>	IBMADT	
<input type="radio"/>	IBMCONSOLE	
<input type="radio"/>	IBMOTS	

Show system schemas

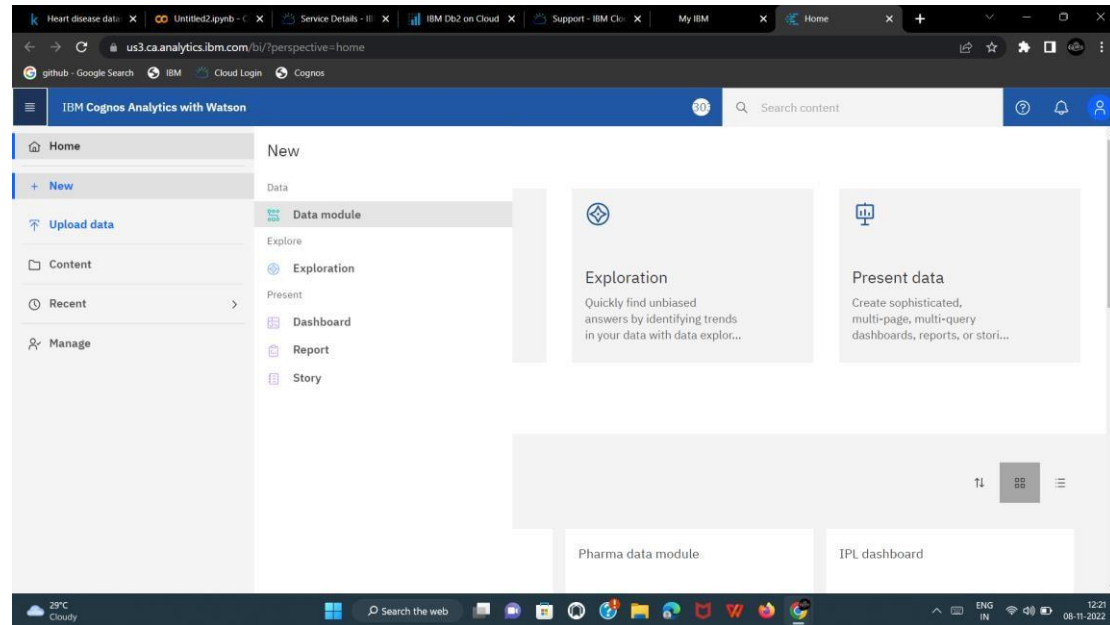
Present data

Create sophisticated, multi-page, multi-query dashboards, reports, or stori...

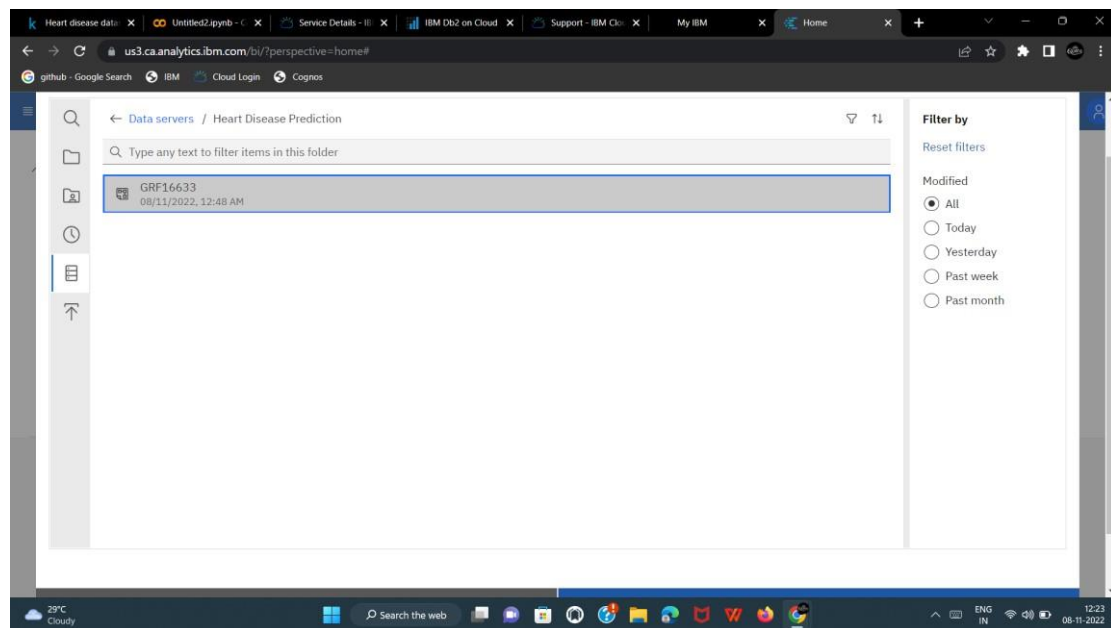
IPL dashboard

Creation of Data Module:

STEP 1: Creation of Data Module.



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



STEP 3: Data Module is created successfully.

The screenshot shows the IBM Cognos Analytics interface. On the left, a 'Data module' sidebar lists various attributes: Age, Sex, Chest Pain Type, Bp, Cholesterol, Fbs Over 120, EKG Results, Max Hr, Exercise Angina, St Depression, and Slope Of St. The main area displays a 'Grid' view of a data table with the following columns: Age, Sex, Chest Pain Type, Bp, Cholesterol, and Fbs Over 120. The table contains 15 rows of patient data.

Age	Sex	Chest Pain Type	Bp	Cholesterol	Fbs Over 120
70	1	4	130	322	0
67	0	3	115	564	0
57	1	2	124	261	0
64	1	4	128	263	0
74	0	2	120	269	0
65	1	4	120	177	0
56	1	3	130	256	1
59	1	4	110	239	0
60	1	4	140	293	0
63	0	4	150	407	0
59	1	4	135	234	0
60	1	4	135	234	0
61	1	4	135	234	0
62	1	4	135	234	0
63	1	4	135	234	0

STEP 4: Save the Data Module in My content.

The screenshot shows the 'Save as' dialog box in IBM Cognos Analytics. The 'Selected destination' is 'My content'. The dialog lists existing items in the 'My content' space:

Name	Type	Last Accessed
Assignment 2	Folder	25/09/2022, 2:20 AM
Data module	Folder	25/09/2022, 12:41 AM
50_startups.csv	Uploaded file	13/09/2022, 8:30 AM
Assignment 1	Exploration	13/09/2022, 9:01 AM
IPL Ball-by-Ball 2008-2020.csv	Uploaded file	13/09/2022, 4:38 AM

The dialog also shows a 'Team content' tab and 'Cancel' and 'Save' buttons at the bottom.

STEP 5: Representation of data module with the datum present in Heart Disease Prediction.

My IBM | Heart Disease Prediction Data Module | us3.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=IE08D4F2300164F7C834588101C96D319&objRef=IE08D4F2300164F7C834588101C96D319&tid=334324... | IBM Cognos Analytics with Watson | Heart Disease Pr ... Data Module | Search content | Properties

Data module | Grid | Relationships | Custom tables

Search

Heart Diseases...Data Module

Navigation paths

Heart

- Age
- Sex
- Chest Pain Type
- Bp
- Cholesterol
- Fbs Over 120
- EKG Results
- Max Hr
- Exercise Angina
- St Depression
- Slope Of St

Age	Sex	Chest Pain Type	Bp	Cholesterol	Fbs Over 120
70	1	4	130	322	0
67	0	3	115	564	0
57	1	2	124	261	0
64	1	4	128	263	0
74	0	2	120	269	0
65	1	4	120	177	0
56	1	3	130	256	1
59	1	4	110	239	0
60	1	4	140	293	0
63	0	4	150	407	0
69	1	4	135	234	0

Search the web | ENG IN | 19:02 | 09-11-2022