JOURNEY SCRAPBOOK

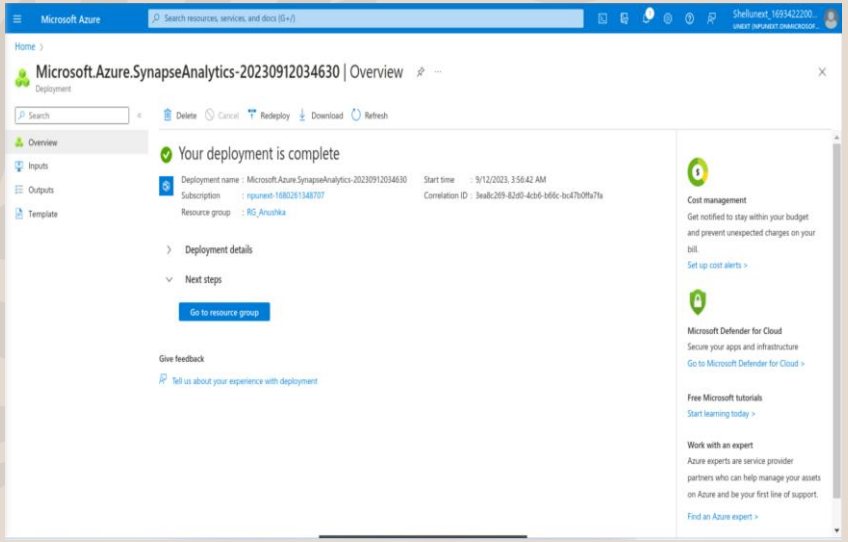
Custom Course – week 3

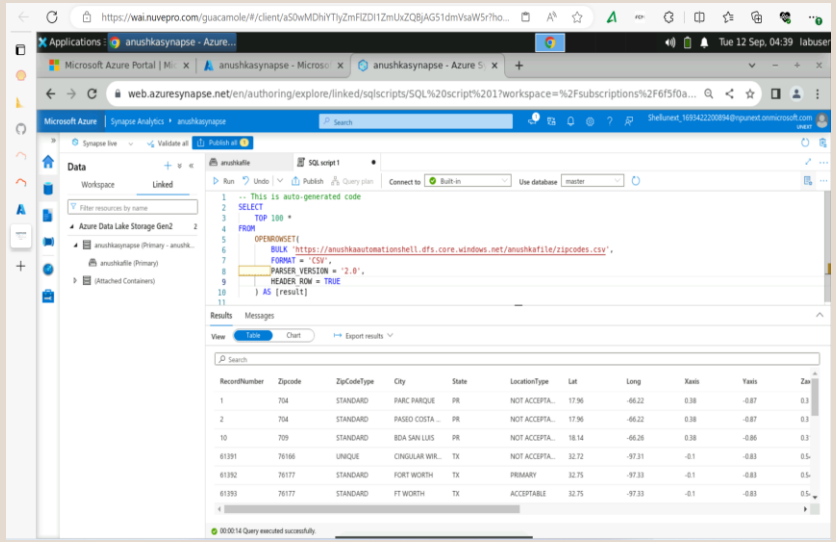
RADHIKA TIBREWAL

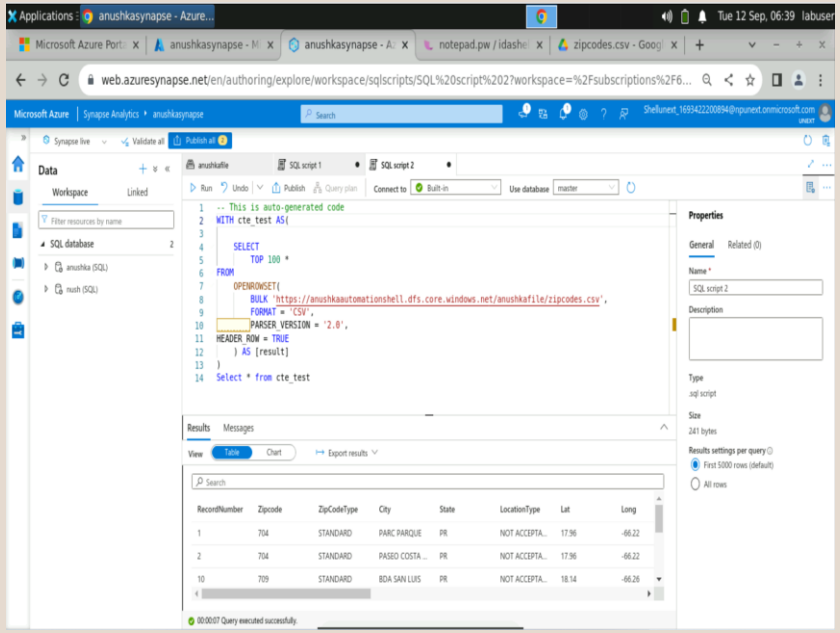
DAY-1

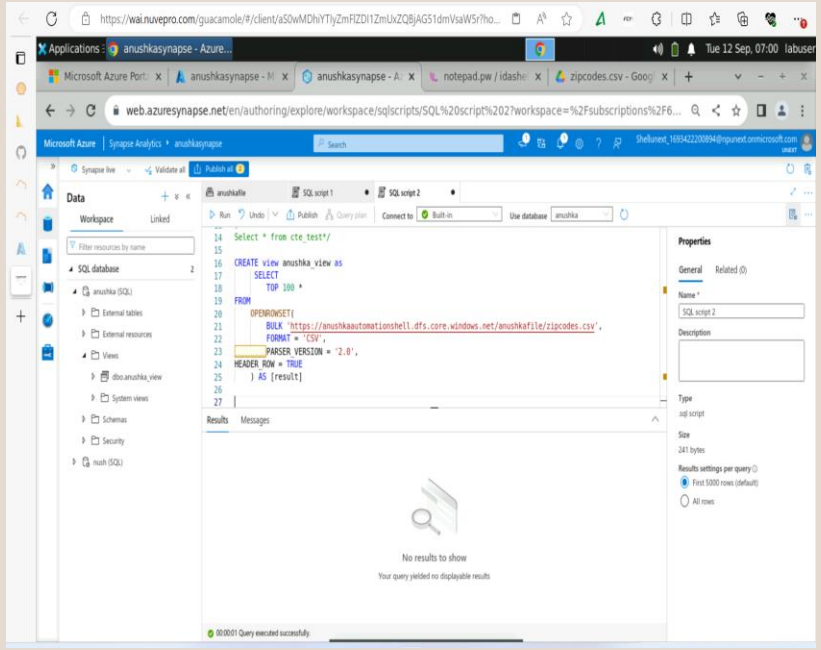
Azure Synapse Analytics

1. Azure Synapse Analytics : Used To Create ADF Services, Spark Notebooks, SQL Data Warehouse
2. SQL Pool
   - Serverless
   - Dedicated Pool
3. Spark Pool
4. Data Exploration
5. SQL Database
6. Collate
7. Common Table Expression (CTE)
8. View
9. DWU (Data Warehousing Unit)
10. Storage Node
11. Compute Node
12. Data Movement Service (DMS)
13. Massive Parallel Processing
14. Replicated Tables
15. Hash Distributed Table
16. Implementing Partitions For An SQL Data Warehouse


Microsoft Azure
Microsoft.Azure.SynapseAnalytics-20230912034630 | Overview
Deployment
Delete
Cancel
Redeploy
Download
Refresh
Overview
Inputs
Outputs
Template
Your deployment is complete
Deployment name : Microsoft.Azure.SynapseAnalytics-20230912034630
Subscription : npunext-1680261348707
Resource group : RG_Anushka
Start time : 9/12/2023, 3:58:42 AM
Correlation ID : 3ea8c269-82d0-4cb6-b66c-bc47b0ffa7fa
Deployment details
Next steps
Go to resource group
Give feedback
Tell us about your experience with deployment
Cost management
Get notified to stay within your budget and prevent unexpected charges on your bill.
Set up cost alerts >
Microsoft Defender for Cloud
Secure your apps and infrastructure
Go to Microsoft Defender for Cloud >
Free Microsoft tutorials
Start learning today >
Work with an expert
Azure experts are service provider partners who can help manage your assets on Azure and be your first line of support.
Find an Azure expert >


https://wai.nuvepro.com/guacamole/#/client/aS0wMDhiYTlyZmFlZDI1ZmUxZQBjAG51dmVsaW5r?ho...
Applications
anushkasynapse - Azure...
Tue 12 Sep, 04:39
labuser
web.azuresynapse.net/en/authoring/explore/linked/sqlscripts/SQL%20script%201?workspace=%2Fsubscriptions%2F6f5f0a...
Microsoft Azure
Synapse Analytics
anushkasynapse
Data
Workspace
Linked
SQL script 1
Connect to
Built-in
Use database
master
-- This is auto-generated code
SELECT
TOP 100 *
FROM
OPENROWSET(
BULK 'https://anushkaautomationshell.dfs.core.windows.net/anushkafile/zipcodes.csv',
FORMAT = 'CSV',
PARSER_VERSION = '2.0',
HEADER_ROW = TRUE
) AS [result]
Results
Messages
View
Table
Chart
Export results
RecordNumber
Zipcode
ZipCodeType
City
State
LocationType
Lat
Long
Xaxis
Yaxis
00:00:14 Query executed successfully.

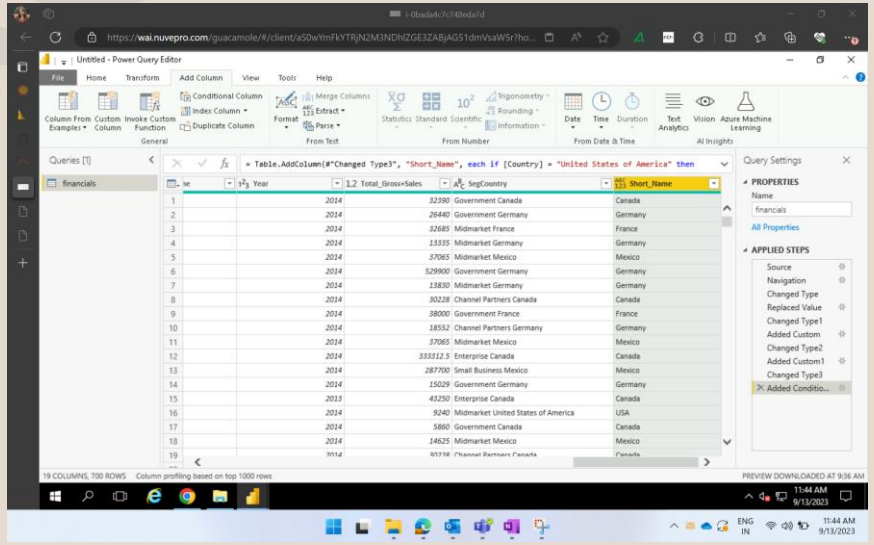

Applications
anushkasynapse - Azure...
Tue 12 Sep, 06:39
labuser
web.azuresynapse.net/en/authoring/explore/workspace/sqlscripts/SQL%20script%202?workspace=%2Fsubscriptions%2F6...
Microsoft Azure
Synapse Analytics
anushkasynapse
Data
Workspace
Linked
SQL database
anushka (SQL)
nush (SQL)
anushkafile
SQL script 1
SQL script 2
Run
Undo
Publish
Query plan
Connect to
Built-in
Use database
master
-- This is auto-generated code
WITH cte_test AS(
SELECT
TOP 100 *
FROM
OPENROWSET(
BULK 'https://anushkaautomationshell.dfs.core.windows.net/anushkafile/zipcodes.csv',
FORMAT = 'CSV',
PARSER_VERSION = '2.0',
HEADER_ROW = TRUE
) AS [result]
)
Select * from cte_test
Properties
General
Related (0)
Name *
SQL script 2
Description
Type
.sql script
Size
241 bytes
Results settings per query
First 5000 rows (default)
All rows
Results
Messages
View
Table
Chart
Export results
RecordNumber
Zipcode
ZipCodeType
City
State
LocationType
Lat
Long
00:00:07 Query executed successfully.

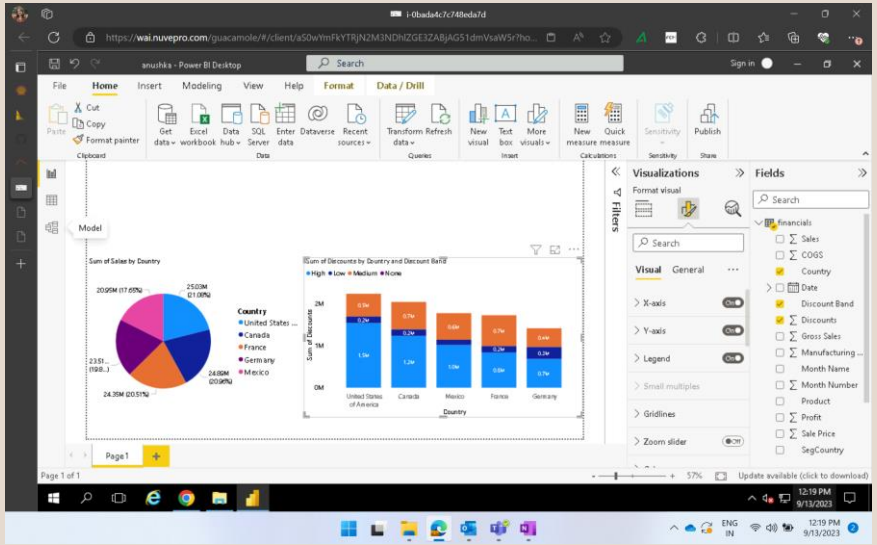

https://wai.nuvepro.com/guacamole/#/client/aS0wMDhiYTlyZmFlZDI1ZmUxZQBjAG51dmVsaW5r?ho...
Applications
anushkasynapse - Azure...
Tue 12 Sep, 07:00
labuser
web.azuresynapse.net/en/authoring/explore/workspace/sqlscripts/SQL%20script%202?workspace=%2Fsubscriptions%2F6...
Microsoft Azure
Synapse Analytics
anushkasynapse
Data
Workspace
Linked
SQL database
anushka (SQL)
External tables
External resources
Views
dbo.anushka_view
System views
Schemas
Security
nush (SQL)
anushkafile
SQL script 1
SQL script 2
Run
Undo
Publish
Query plan
Connect to
Built-in
Use database
anushka
Select * from cte_test*/
CREATE view anushka_view as
SELECT
TOP 100 *
FROM
OPENROWSET(
BULK 'https://anushkaautomationshell.dfs.core.windows.net/anushkafile/zipcodes.csv',
FORMAT = 'CSV',
PARSER_VERSION = '2.0',
HEADER_ROW = TRUE
) AS [result]
Properties
General
Related (0)
Name *
SQL script 2
Description
Type
sql script
Size
241 bytes
Results settings per query
First 5000 rows (default)
All rows
Results
Messages
No results to show
Your query yielded no displayable results
00:00:01 Query executed successfully.

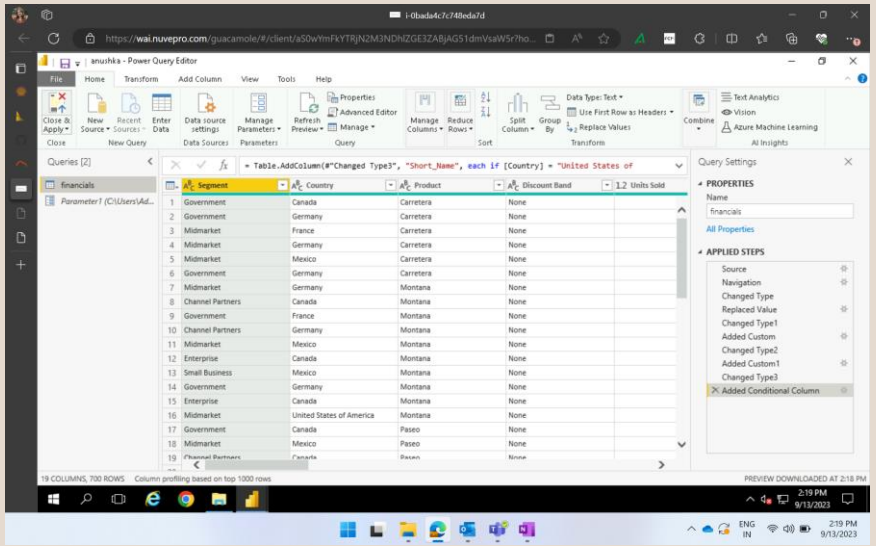
DAY-2

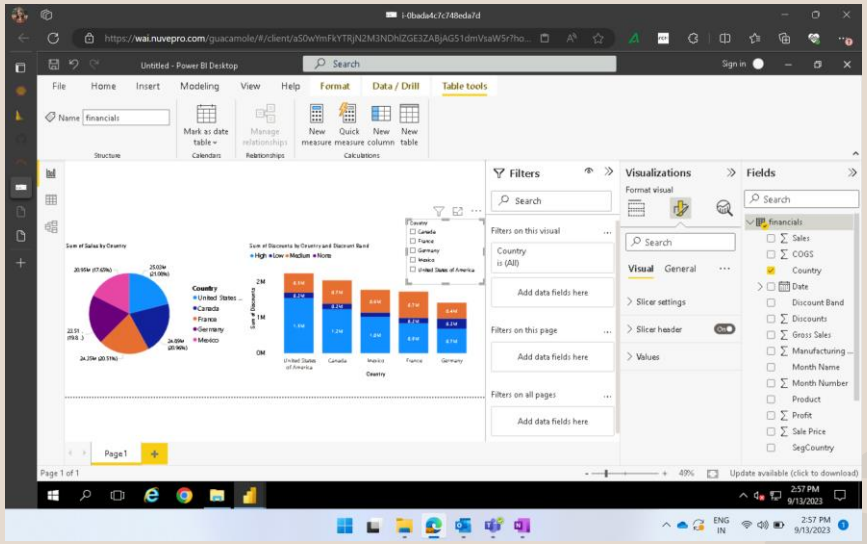
Data Visualization - Power BI

1. PBI Desktop
2. Power BI Supports Multiple Data Connectors.
3. Power Query Editor: Used To Transform Data
    - Language Used At Back-end - M Language
    - Different Fields Of This Editor
4. Get Data In PBI Report And Transform It In Power Query Editor
5. Getting Familiar With Different Visuals
6. Parameter
7. Filters :
    - Visual Level
    - Page Level
    - Report Level
8. Slicers
9. DAX Measures
10. DAX Calculated Columns
11. RLS (Manage Roles)


Untitled - Power Query Editor
Table.AddColumn(#"Changed Type3", "Short_Name", each if [Country] = "United States of America" then


anushka - Power BI Desktop
Visualizations
Fields


anushka - Power Query Editor
Table.AddColumn(#"Changed Type3", "Short_Name", each if [Country] = "United States of


Untitled - Power BI Desktop
Visualizations
Fields

DAY-3

Power BI - Day 2

1.Data Modeling : Establishing Relationships Between Tables

2.Univariant

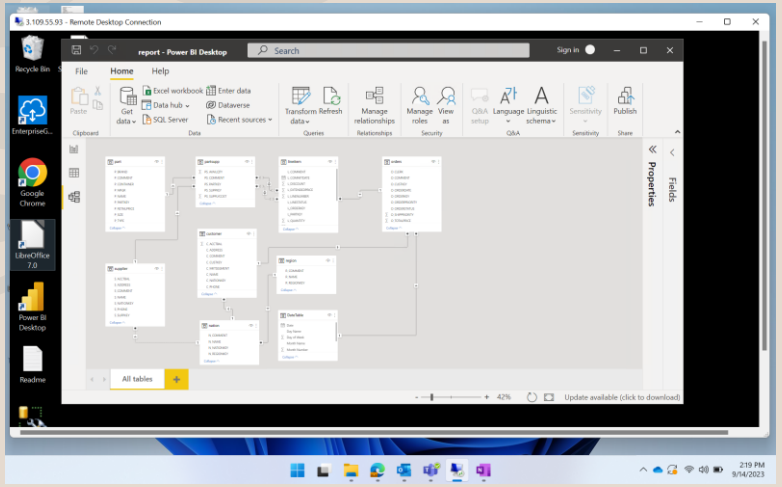
3.Bivariant

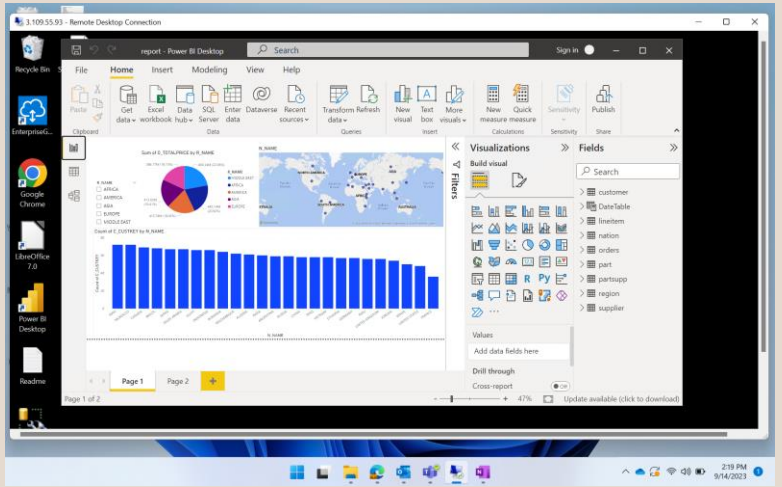
4.Multivariant

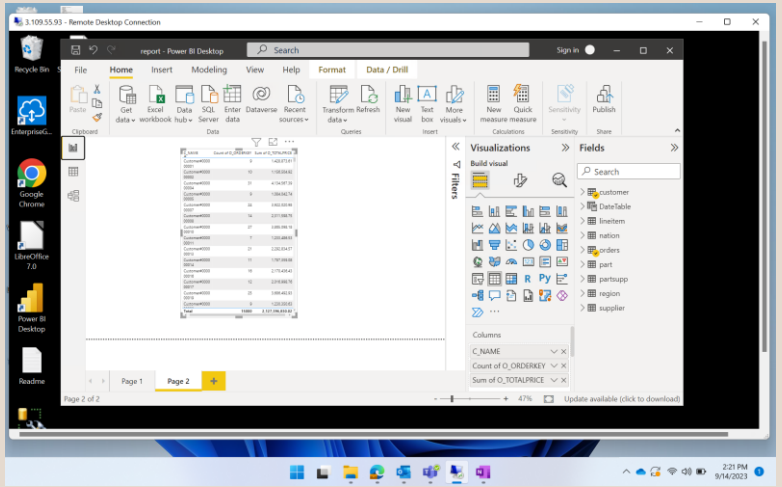
5.Drill Through

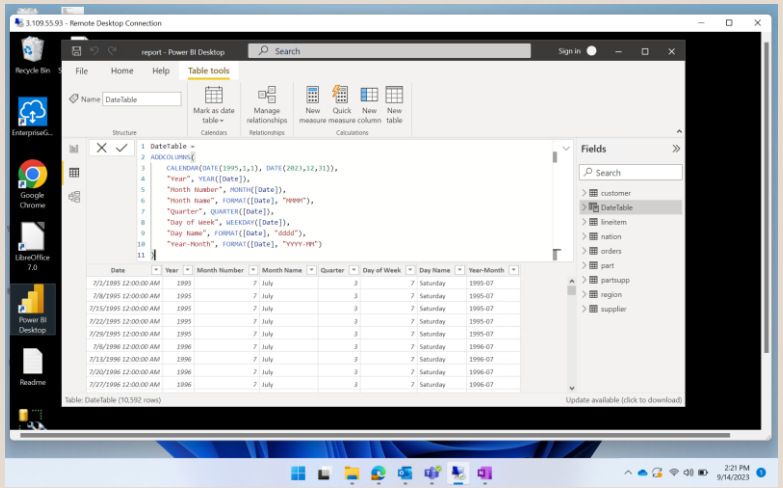
6.Date Table

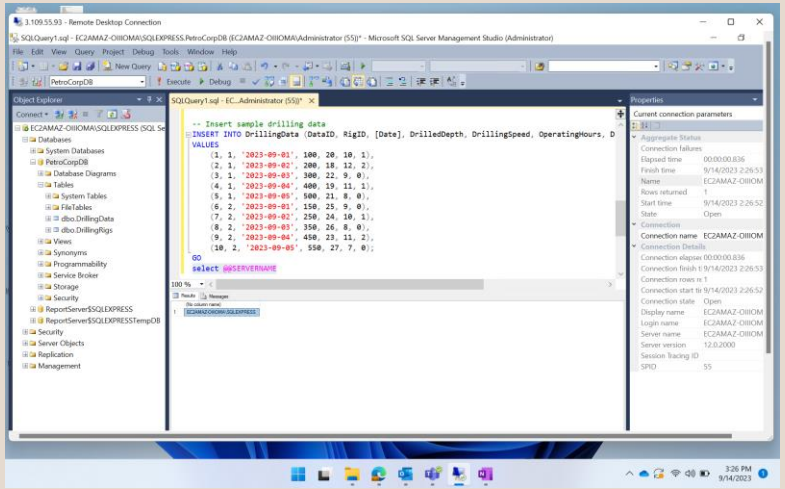
7.Connection Of SQL Server And Power BI

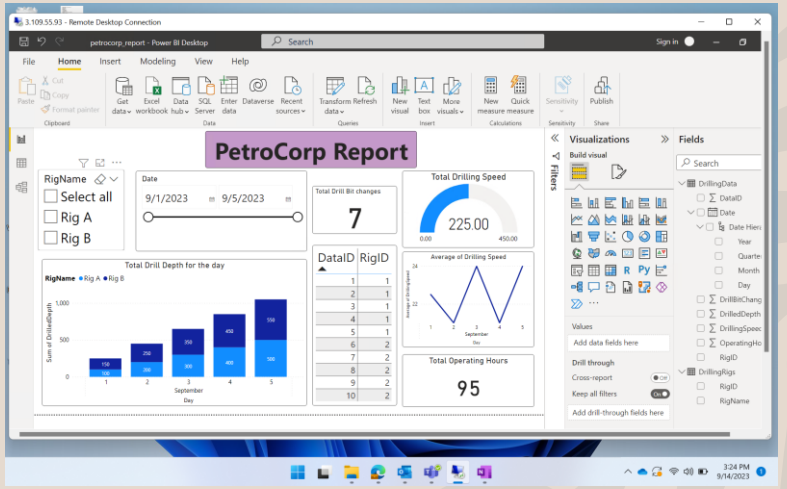








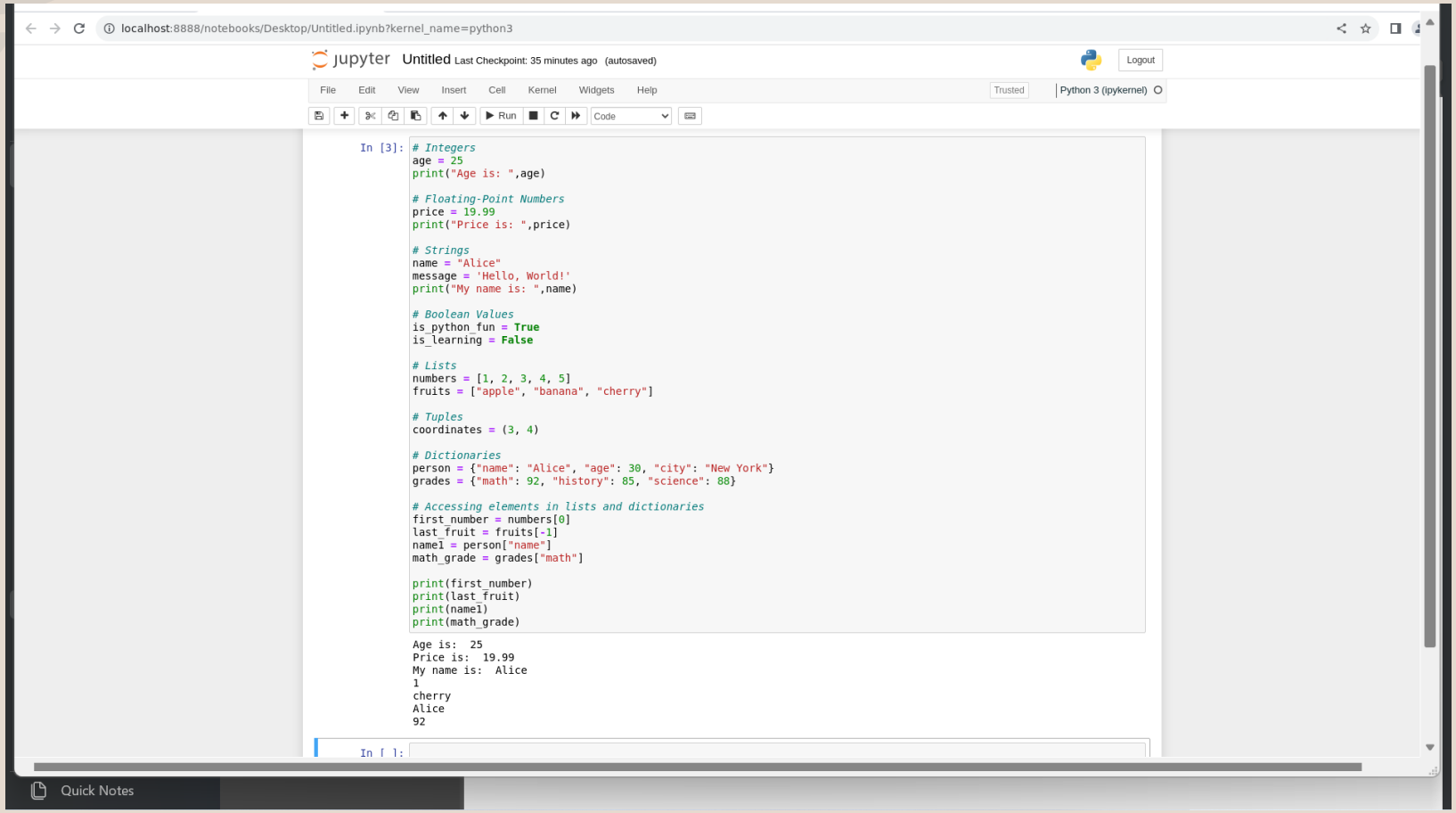




DAY-4

Python

1. Hands-on Assessment - Power BI
2. Jupyter Notebook Launch
3. Datatypes In Python:
    - Integer
    - Float
    - String
    - List
    - Dictionary
    - Tuple
    - Boolean
4. Arithmetic
5. Logic


localhost:8888/notebooks/Desktop/Untitled.ipynb?kernel_name=python3
jupyter Untitled Last Checkpoint: 35 minutes ago (autosaved)
Logout
File Edit View Insert Cell Kernel Widgets Help
Trusted
Python 3 (ipykernel)
Run
Code
In [3]:
# Integers
age = 25
print("Age is: ",age)
# Floating-Point Numbers
price = 19.99
print("Price is: ",price)
# Strings
name = "Alice"
message = 'Hello, World!'
print("My name is: ",name)
# Boolean Values
is_python_fun = True
is_learning = False
# Lists
numbers = [1, 2, 3, 4, 5]
fruits = ["apple", "banana", "cherry"]
# Tuples
coordinates = (3, 4)
# Dictionaries
person = {"name": "Alice", "age": 30, "city": "New York"}
grades = {"math": 92, "history": 85, "science": 88}
# Accessing elements in lists and dictionaries
first_number = numbers[0]
last_fruit = fruits[-1]
name1 = person["name"]
math_grade = grades["math"]
print(first_number)
print(last_fruit)
print(name1)
print(math_grade)
Age is: 25
Price is: 19.99
My name is: Alice
1
cherry
Alice
92
In [ ]:
Quick Notes

File Edit View Insert Cell Kernel Widgets Help Not Trusted Python 3 (ipykernel)

Run Code

In [1]:
```
sta = [['a','b','c','d','e'],
       ['a','c','d','l','k'],
       ['w','e','i','r','d'],
       ['a','s','h','o','l']]



class parameters:
    profit = False
    low_price = False
    user_satisfaction = False

    def __init__(self,profit,low_price,user_satisfaction):
        self.profit = profit
        self.low_price = low_price
        self.user_satisfaction = user_satisfaction

    def setProfit(self, profit):
        self.profit = profit

    def setLowPrice(self, low_price):
        self.low_price = low_price

    def setUserSat(self,user_sat):
        self.user_satisfaction = user_sat

N_reg = parameters(False,True,True)
S_reg = parameters(True,True,True)
E_reg = parameters(True,False,False)
W_reg = parameters(True,True,False)



Region = [N_reg, S_reg, E_reg, W_reg]
for i in range(len(Region)):
    profitable = Region[i].profit and (Region[i].low_price or Region[i].user_satisfaction)
    if profitable:
        sta[i].append('n')

print(sta)
```

```
[['a', 'b', 'c', 'd', 'e'], ['a', 'c', 'd', 'l', 'k', 'n'], ['w', 'e', 'i', 'r', 'd'], ['a', 's', 'h', 'o', 'l',
'n']]
```

In [ ]:

Thank You