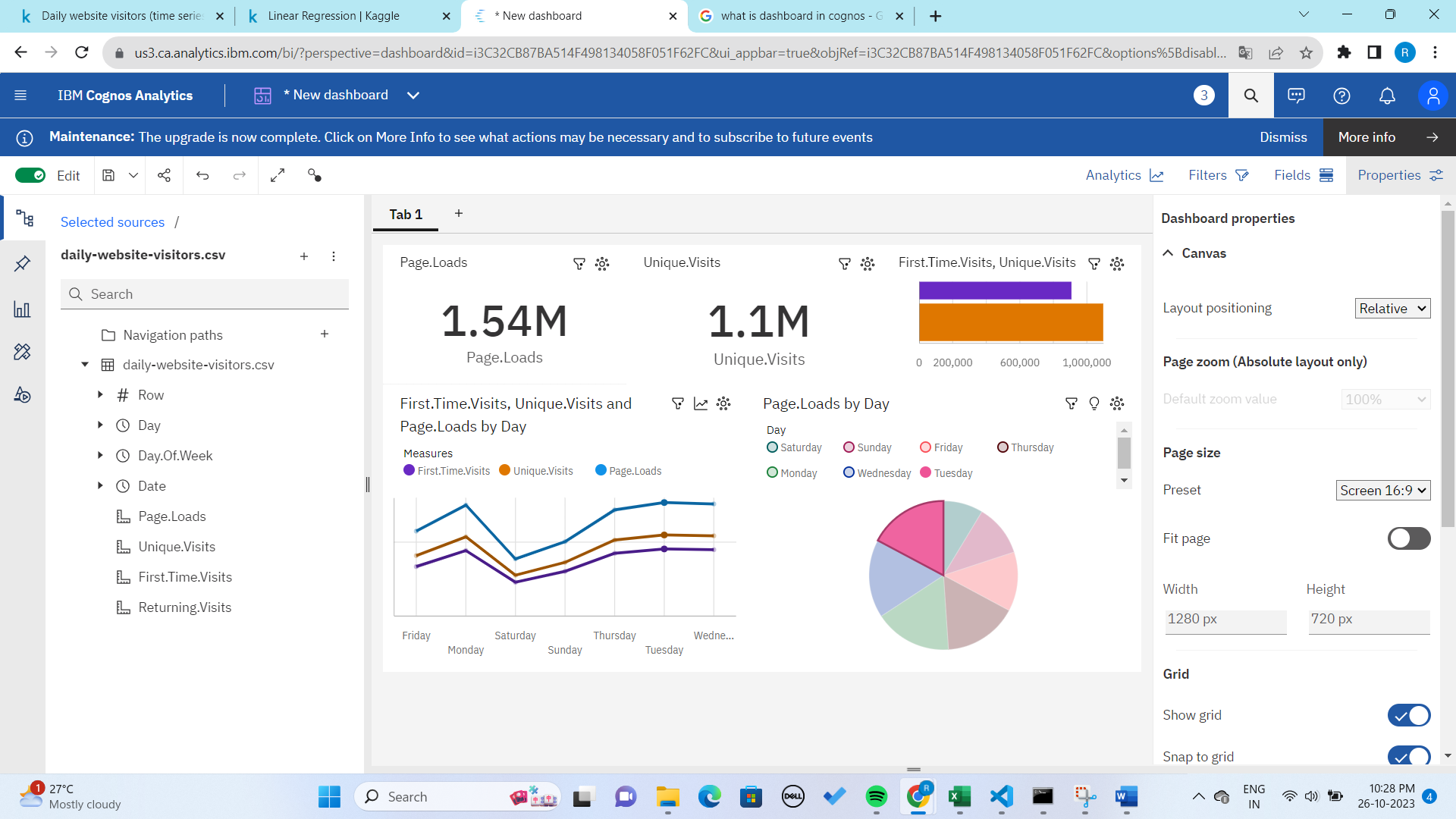
**Phase 4: Development Part 2**

**Introduction**

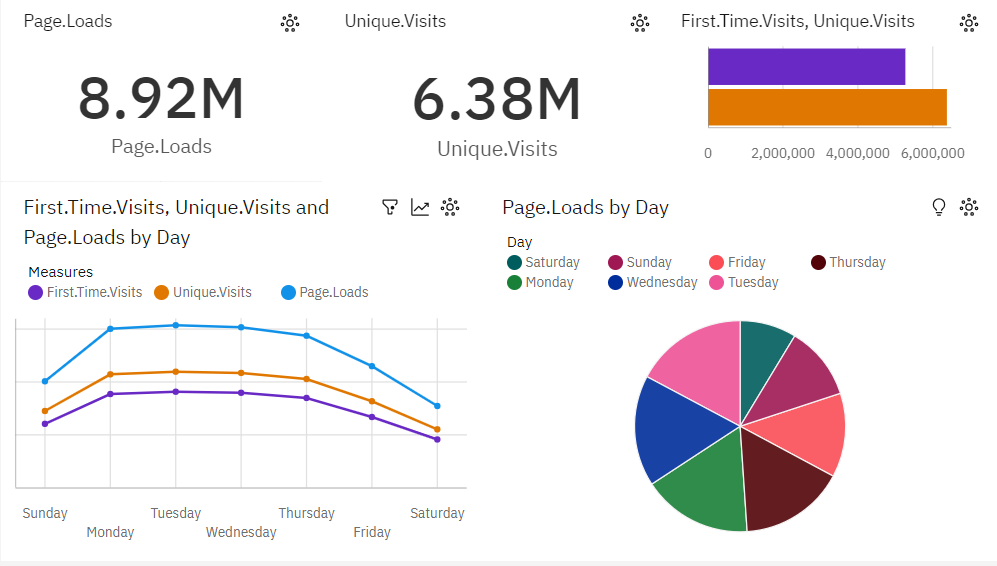
In this phase 3 project the dataset of website visitors can be visualized using IBM Cognos. IBM Cognos is a business intelligence and performance management software suite developed by IBM. It is designed to help organizations make informed business decisions by providing capabilities for reporting, analytics, dashboards, scorecards, and data visualization. IBM Cognos is used by businesses and enterprises to transform data from various sources into valuable insights and actionable information.

**Dashboard using IBM cognos**



The dashboard is created for website load in a week.

**Dashboard**

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**Python code:**

import pandas as pd

from sklearn import neighbors

import matplotlib.pyplot as plt

import plotly.express as px

import plotly.graph\_objects as go

from statsmodels.tsa.seasonal import seasonal\_decompose

from statsmodels.tsa.tsatools import freq\_to\_period

from statsmodels.graphics.tsaplots import plot\_pacf

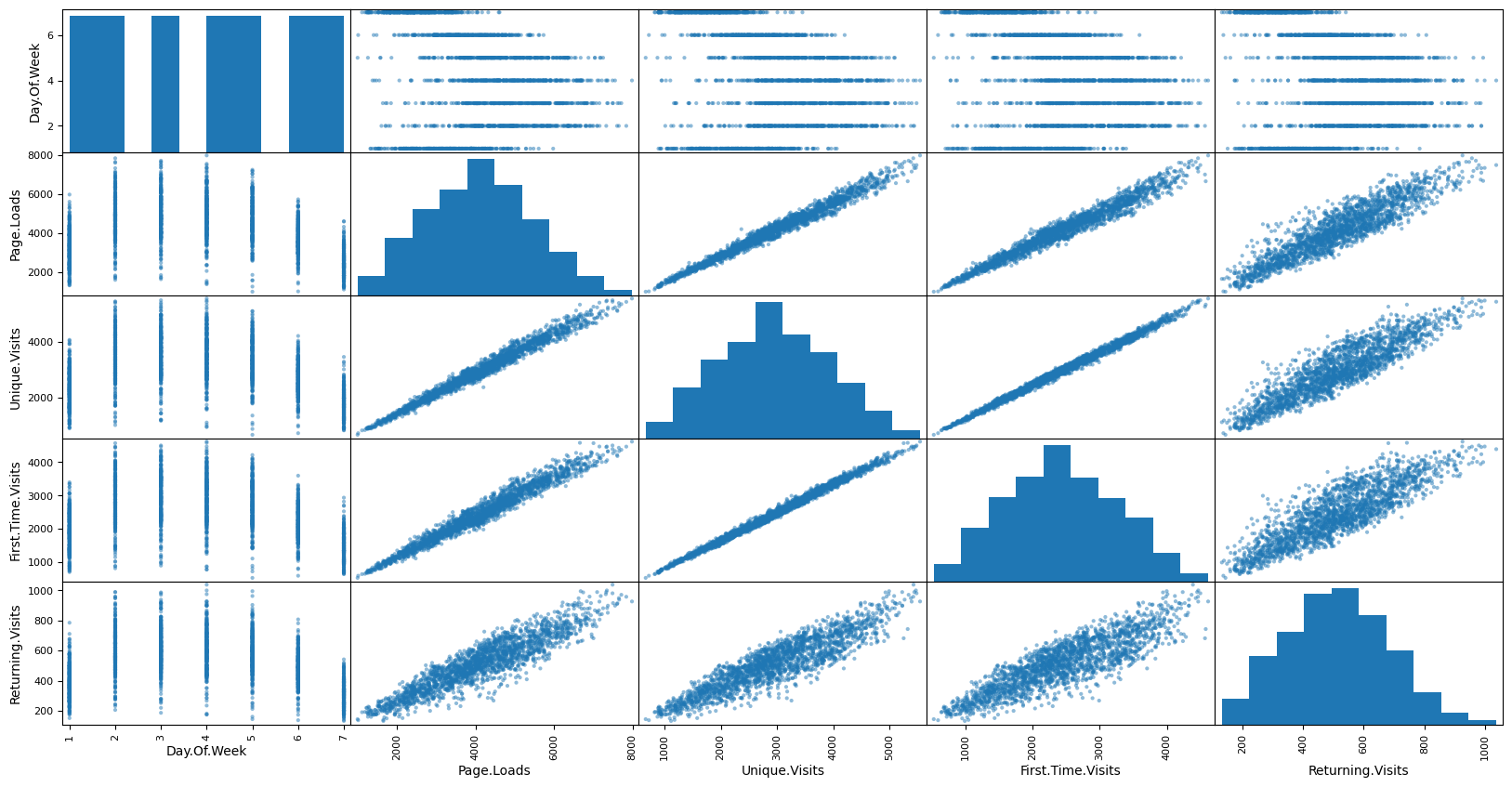
from statsmodels.tsa.arima\_model import ARIMA

import statsmodels.api as sm

data=pd.read\_csv("D:\Data Analytics\daily-website-visitors.csv")

print(data.head(7))

pd.plotting.scatter\_matrix(df, figsize=(20,10))

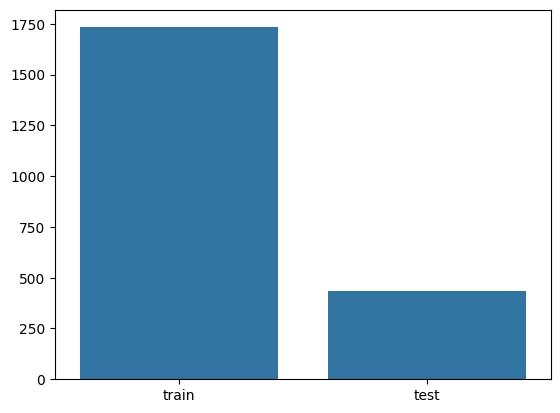


from sklearn.model\_selection import train\_test\_split

Y = df['Unique.Visits']

X = df[['Page.Loads']]

x\_train, x\_test,y\_train,y\_test = train\_test\_split(X,Y,test\_size =0.2)



from sklearn.linear\_model import LinearRegression

clf = LinearRegression()

clf.fit(x\_train,y\_train)

preds = clf.predict(x\_test)

plt.scatter(x\_train, y\_train, color="blue", label="data")

plt.plot(x\_test, preds, color="red", label="prediction")

plt.legend()

