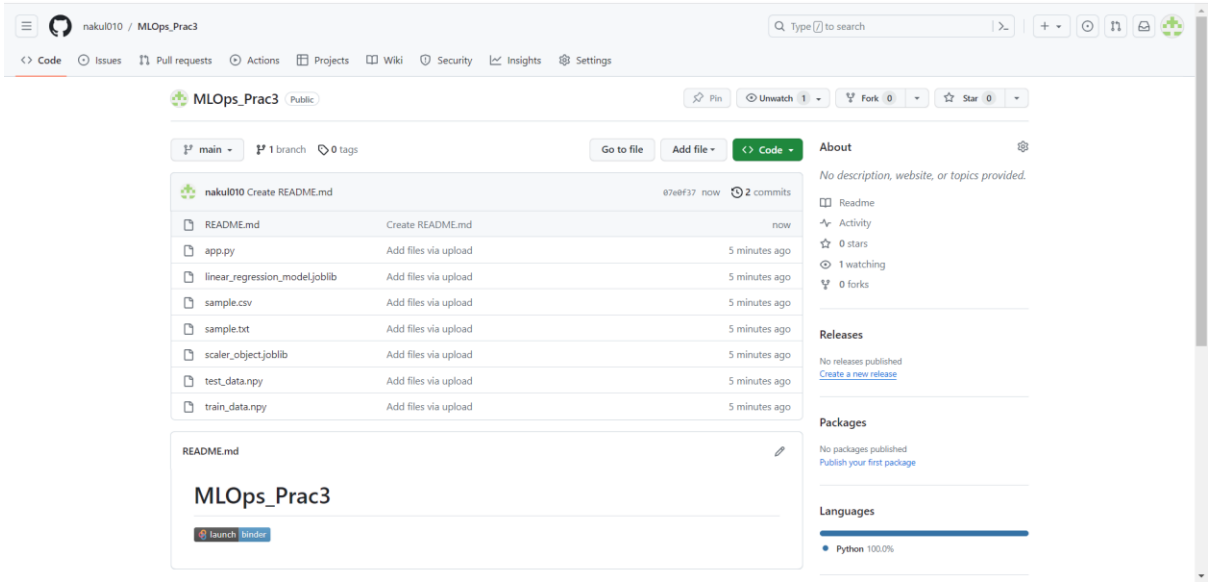
Practical-3

Aim: Generation of Reproducible and Interactive Machine Learning Project using Binder Hub.

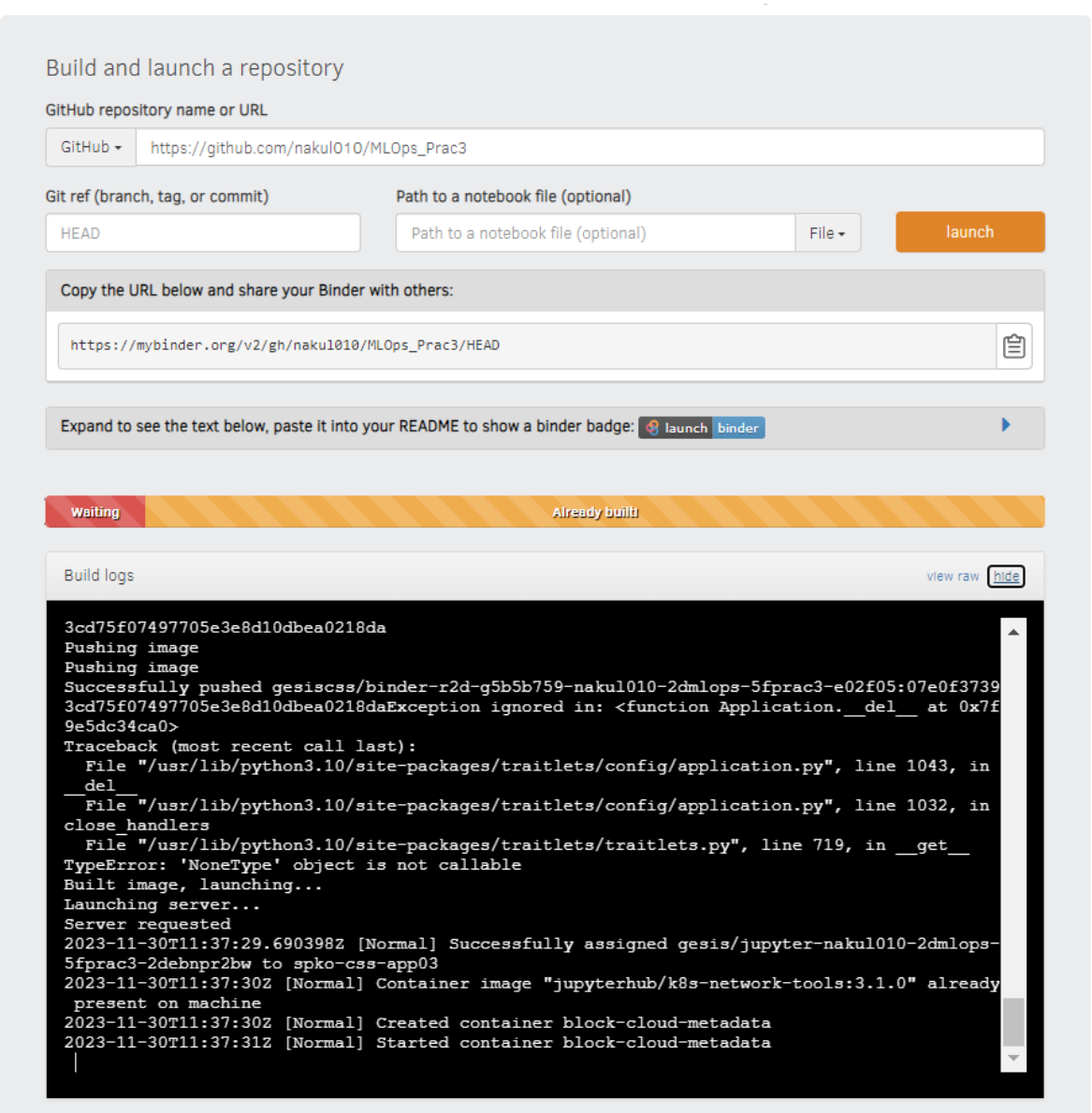
Task 1:

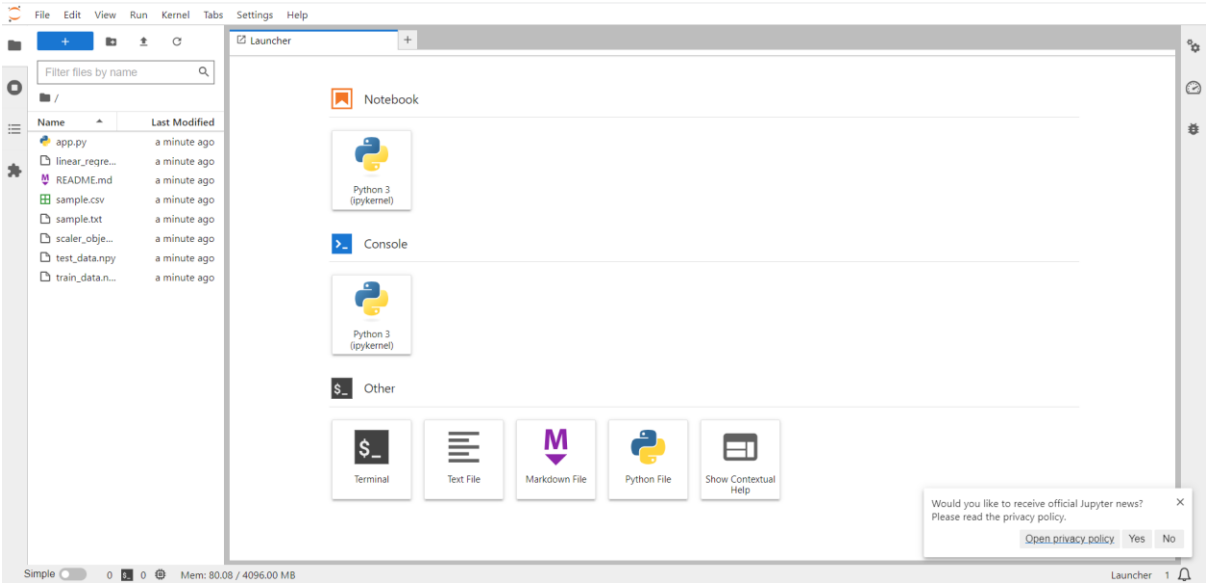
Create the GitHub repository for the house rate prediction project created in practical 2.

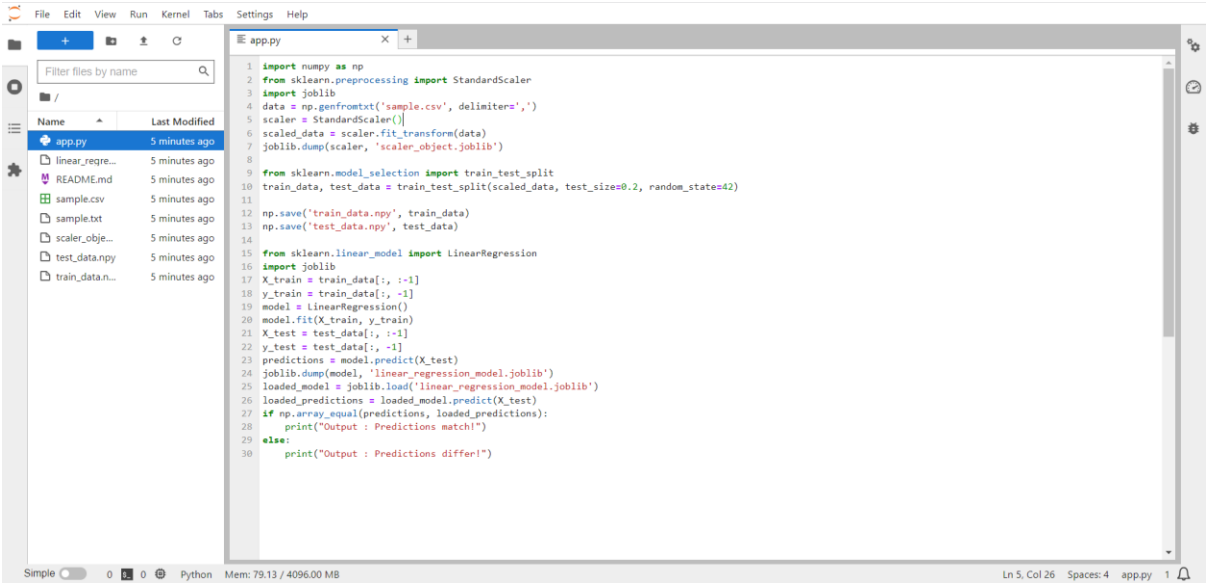


Task 2:

Integrate your repository with the binder to make your project interactive. (Hint: refer to the following link for the steps: https://mybinder.org/)




File Edit View Run Kernel Tabs Settings Help
Launcher
Filter files by name
Name
Last Modified
app.py a minute ago
linear_reqre... a minute ago
README.md a minute ago
sample.csv a minute ago
sample.txt a minute ago
scaler_obje... a minute ago
test_data.npy a minute ago
train_data.n... a minute ago
Notebook
Python 3 (ipykernel)
Console
Python 3 (ipykernel)
Other
Terminal
Text File
Markdown File
Python File
Show Contextual Help
Would you like to receive official Jupyter news?
Please read the privacy policy.
Open privacy policy
Yes
No
Simple
Mem: 80.08 / 4096.00 MB
Launcher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app.py
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README.md 5 minutes ago
sample.csv 5 minutes ago
sample.txt 5 minutes ago
scaler_obje... 5 minutes ago
test_data.npy 5 minutes ago
train_data.n... 5 minutes ago
import numpy as np
from sklearn.preprocessing import StandardScaler
import joblib
data = np.genfromtxt('sample.csv', delimiter=',')
scaler = StandardScaler()
scaled_data = scaler.fit_transform(data)
joblib.dump(scaler, 'scaler_object.joblib')
from sklearn.model_selection import train_test_split
train_data, test_data = train_test_split(scaled_data, test_size=0.2, random_state=42)
np.save('train_data.npy', train_data)
np.save('test_data.npy', test_data)
from sklearn.linear_model import LinearRegression
import joblib
X_train = train_data[:, :-1]
y_train = train_data[:, -1]
model = LinearRegression()
model.fit(X_train, y_train)
X_test = test_data[:, :-1]
y_test = test_data[:, -1]
predictions = model.predict(X_test)
joblib.dump(model, 'linear_regression_model.joblib')
loaded_model = joblib.load('linear_regression_model.joblib')
loaded_predictions = loaded_model.predict(X_test)
if np.array_equal(predictions, loaded_predictions):
print("Output : Predictions match!")
else:
print("Output : Predictions differ!")
Simple
Python
Mem: 79.13 / 4096.00 MB
Ln 5, Col 26
Spaces: 4
app.py