

DATA602

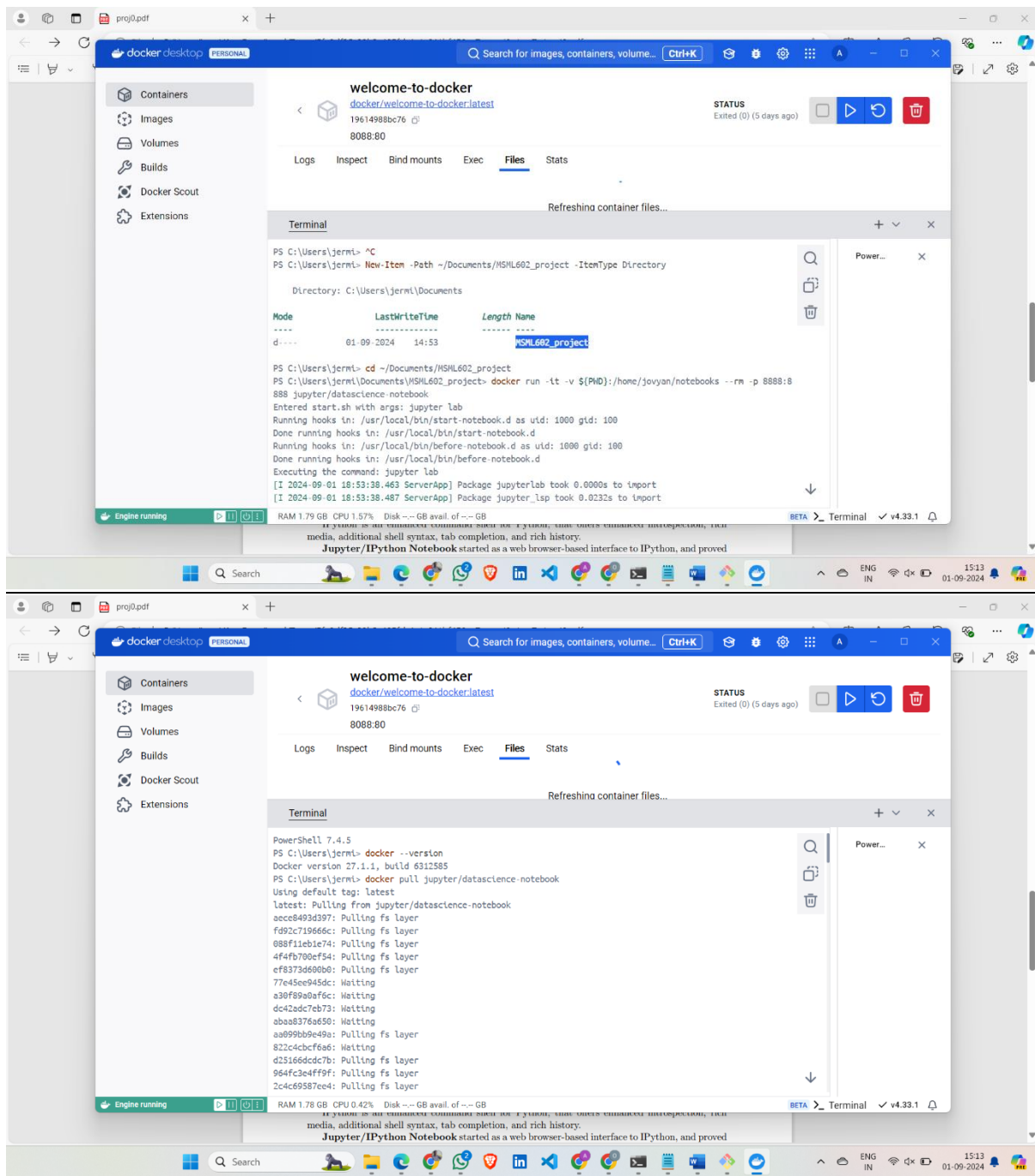
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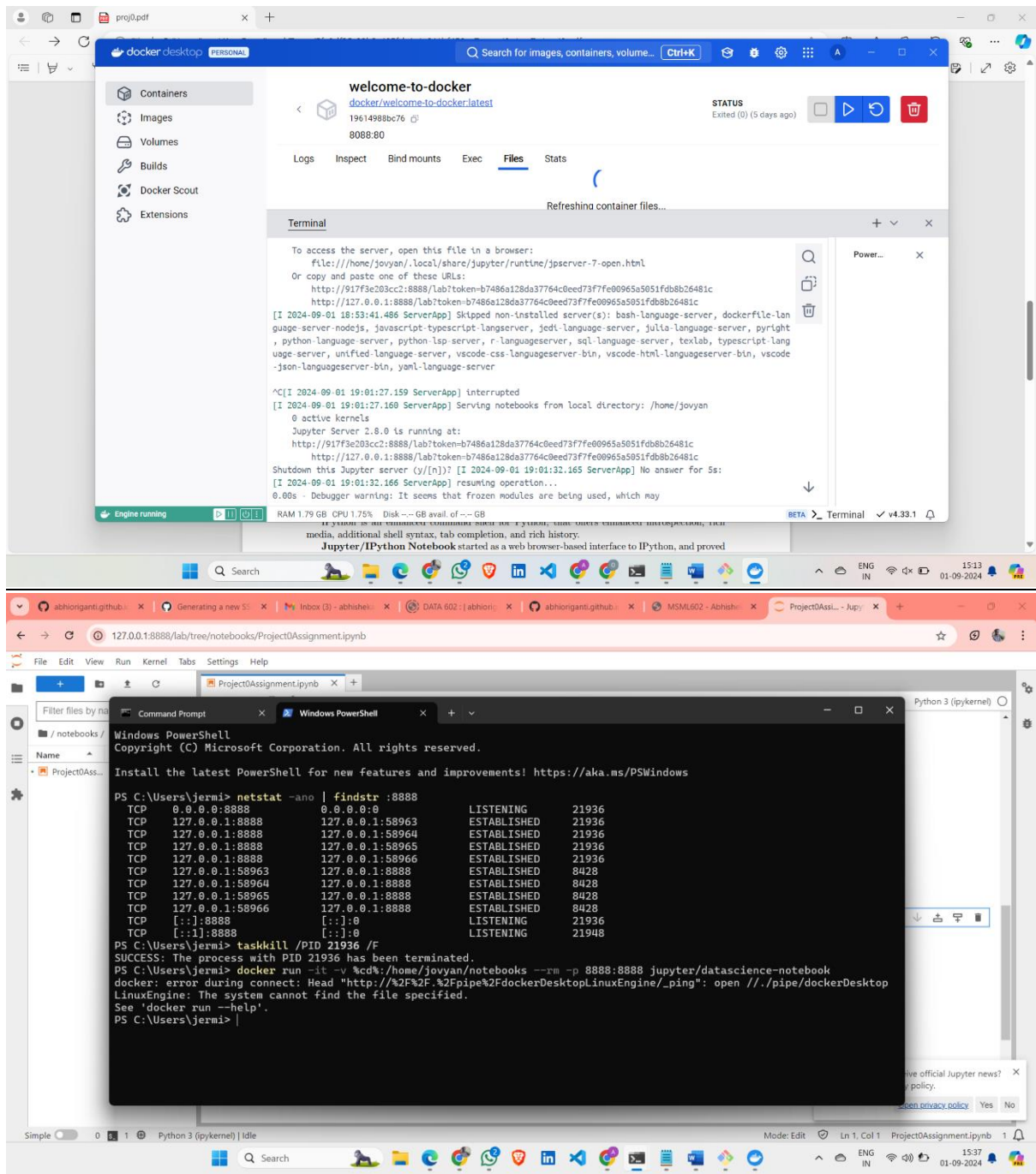
Project - 0

Github.io link : <https://abhioriganti.github.io/>

DOCKER

Commands:





Jupyter Lab Interface:

The image displays two screenshots of the Jupyter Lab interface, showing the progression of a notebook from code execution to plot visualization.

Top Screenshot: The interface shows a code cell with the following Python code:

```
[1]: import numpy as np
import matplotlib.pyplot as plt

# Generate some sample data
x = np.linspace(0, 10, 100)
y1 = np.sin(x)
y2 = np.cos(x)

# Create a plot
plt.figure(figsize=(10, 6))
plt.plot(x, y1, label='sin(x)')
plt.plot(x, y2, label='cos(x)')
plt.xlabel('x')
plt.ylabel('y')
plt.title('Sine and Cosine Functions')
plt.legend()
plt.grid(True)

# Display the plot
plt.show()

# Print some basic statistics
print(f"Mean of sin(x): {np.mean(y1):.4f}")
print(f"Mean of cos(x): {np.mean(y2):.4f}")
print(f"Standard deviation of sin(x): {np.std(y1):.4f}")
print(f"Standard deviation of cos(x): {np.std(y2):.4f}")
```

The plot area shows a partial view of the sine and cosine functions, with the y-axis ranging from 0.75 to 1.00.

Bottom Screenshot: The same code cell is shown, but the plot area now displays the full visualization of the sine and cosine functions. The x-axis ranges from 0 to 10, and the y-axis ranges from -1.00 to 1.00. The plot is titled "Sine and Cosine Functions" and includes a legend for $\sin(x)$ (blue line) and $\cos(x)$ (orange line). Below the plot, the following statistics are printed:

```
Mean of sin(x): 0.1792
Mean of cos(x): -0.0530
Standard deviation of sin(x): 0.6647
Standard deviation of cos(x): 0.7233
```