

Assignment 03

Sabrina Minaya Vasquez

September 24, 2025

1 Load Dataset

```
from pyspark.sql import SparkSession
import pandas as pd
import plotly.express as px
import plotly.io as pio
import numpy as np

np.random.seed(42)

pio.renderers.default = "notebook"

# Initialize Spark Session
spark = SparkSession.builder.appName("LightcastData").getOrCreate()

# Load Data
df = spark.read.option("header", "true").option("inferSchema", "true").option("multiline", "true").load("data/lightcast_data.csv")

# Show Schema and Sample Data
print("---This is Diagnostic check, No need to print it in the final doc---")

df.printSchema() # comment this line when rendering the submission
df.show(5)
```

[Stage 7:>

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---This is Diagnostic check, No need to print it in the final doc---
root

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only showing top 5 rows