trinket | Python3 | Run | Share

main.py | Titanic-Dataset (1).csv | Titanic-Dataset.csv

```python
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt

df = pd.read_csv("Titanic-Dataset.csv")
df.columns = [c.strip() for c in df.columns]

df["Age"] = df["Age"].fillna(df["Age"].median())
df["Fare"] = df["Fare"].fillna(df["Fare"].median())
df["Embarked"] = df["Embarked"].fillna(df["Embarked"].mode()[0])

df["Sex"] = np.where(df["Sex"] == "male", 0, 1)

predictions = []
for i, row in df.iterrows():
    if row["Sex"] == 1:
        predictions.append(1)
    elif row["Pclass"] == 1 and row["Age"] < 50:
        predictions.append(1)
    else:
        predictions.append(0)

df["Predicted"] = predictions

correct_predictions = (df["Predicted"] == df["Survived"]).sum()
total_passengers = len(df)
accuracy = correct_predictions / total_passengers

print("Total Passengers:", total_passengers)
print("Correct Predictions:", correct_predictions)
print("Accuracy:", round(accuracy, 3))

plt.figure(figsize=(12, 10))
```

trinket.io/embed/python3/a5bd54189b

trinket | Python3 | Run | Share

main.py | Titanic-Dataset (1).csv | Titanic-Dataset.csv

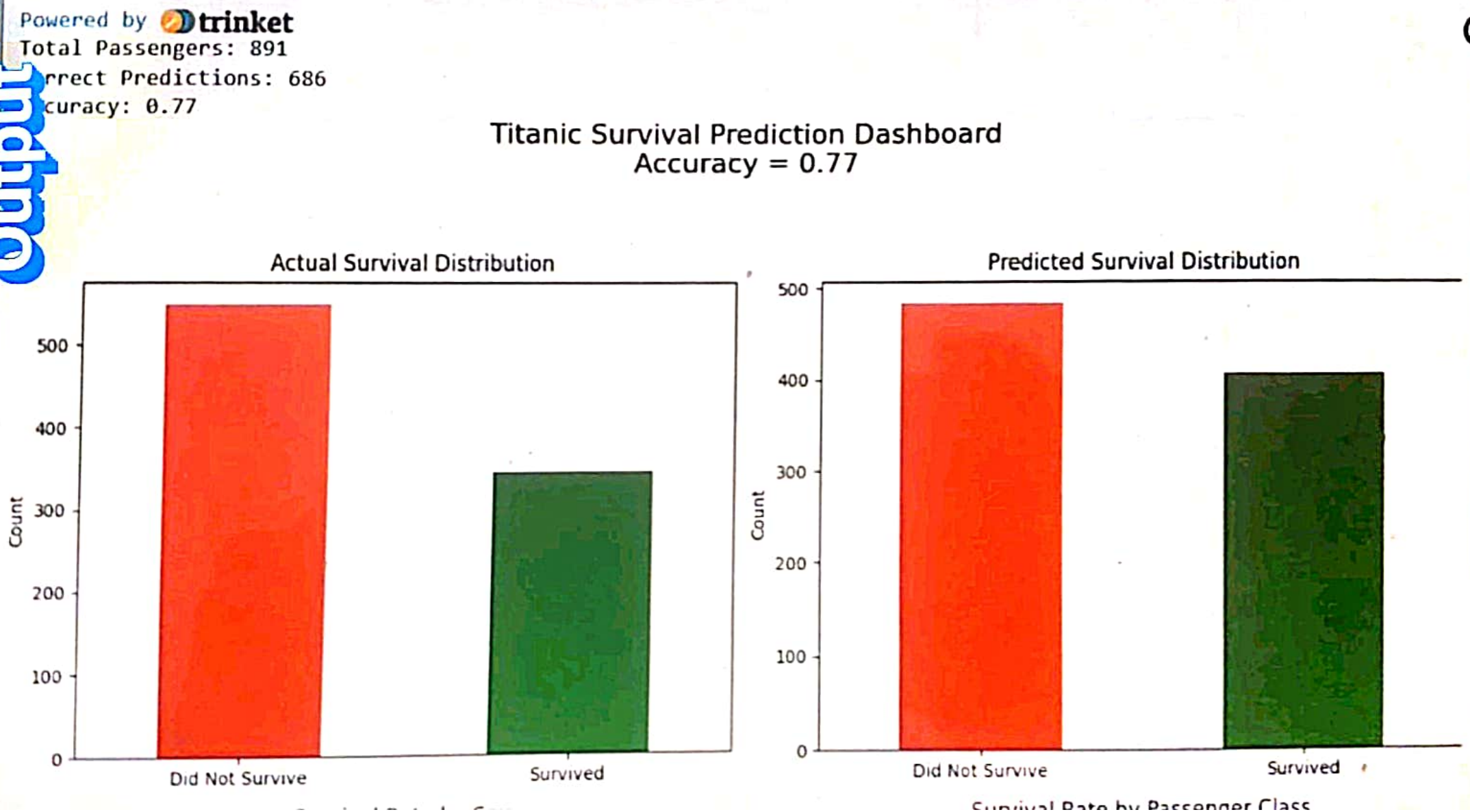
```
correct_predictions = (df["Predicted"] == df["Survived"]).sum()
total_passengers = len(df)
accuracy = correct_predictions / total_passengers

print("Total Passengers:", total_passengers)
print("Correct Predictions:", correct_predictions)
print("Accuracy:", round(accuracy, 3))

plt.figure(figsize=(12, 10))

plt.subplot(2, 2, 1)
df["Survived"].value_counts().plot(kind="bar", color=["red", "green"])
plt.title("Actual Survival Distribution")
plt.xticks([0, 1], ["Did Not Survive", "Survived"], rotation=0)
plt.ylabel("Count")

plt.subplot(2, 2, 2)
df["Predicted"].value_counts().plot(kind="bar", color=["red", "green"])
plt.title("Predicted Survival Distribution")
plt.xticks([0, 1], ["Did Not Survive", "Survived"], rotation=0)
plt.ylabel("Count")

plt.subplot(2, 2, 3)
df.groupby("Sex")[["Survived", "Predicted"]].mean().plot(kind="bar", ax=plt.gca())
plt.title("Survival Rate by Sex")
plt.xticks([0, 1], ["Male", "Female"], rotation=0)
plt.ylabel("Rate (0-1)")

plt.subplot(2, 2, 4)
df.groupby("Pclass")[["Survived", "Predicted"]].mean().plot(kind="bar", ax=plt.gca())
plt.title("Survival Rate by Passenger Class")
plt.xticks([0, 1, 2], ["1st Class", "2nd Class", "3rd Class"], rotation=0)
plt.ylabel("Rate (0-1)")

plt.suptitle(f"Titanic Survival Prediction Dashboard\nAccuracy = {round(accuracy, 3)}", fontsize=16)
plt.tight_layout(rect=[0, 0, 1, 0.95])
plt.show()
```

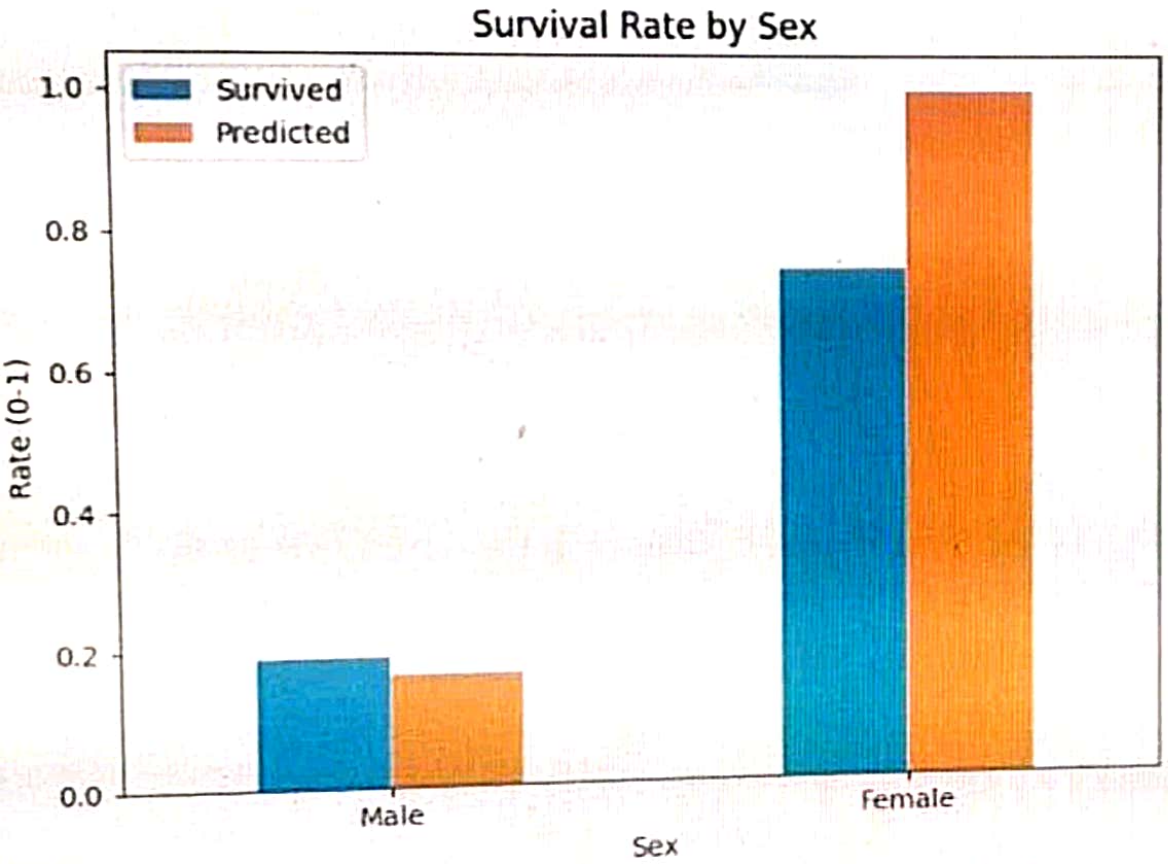
Share | Remix

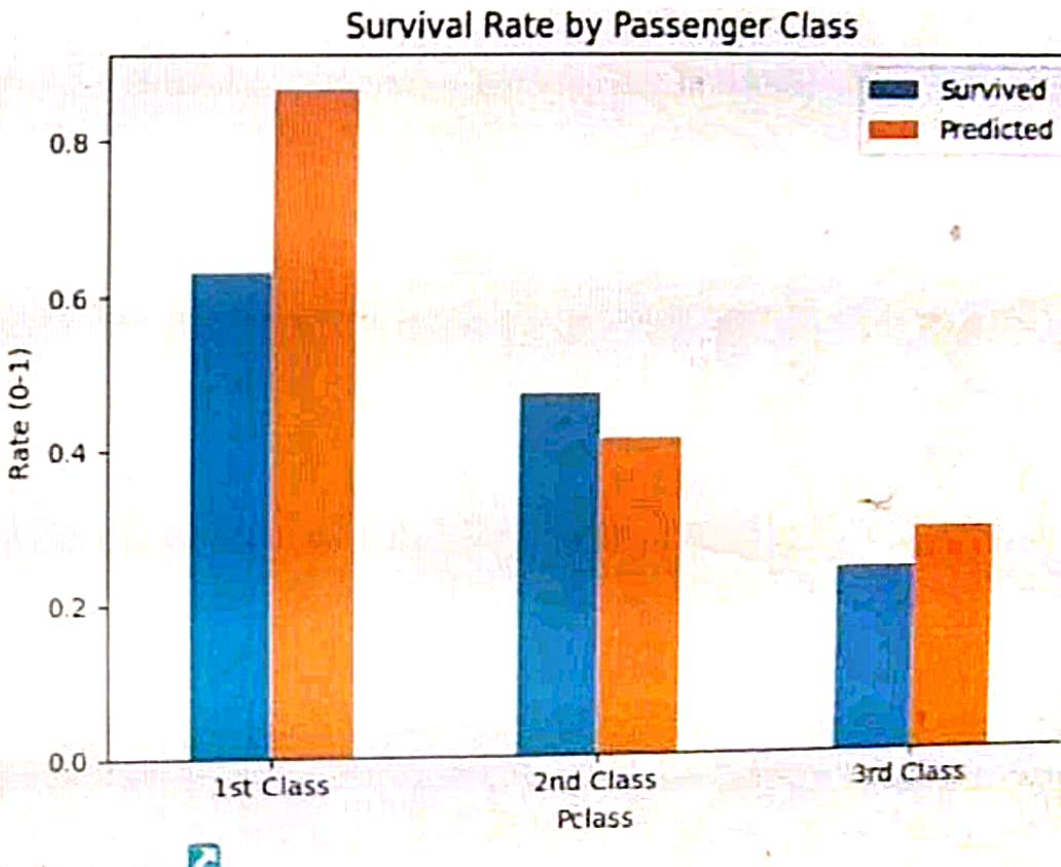
Powered by trinket

Output

```
Total Passengers: 891
rrect Predictions: 686
curacy: 0.77
```







trinket_plot.png

Show all