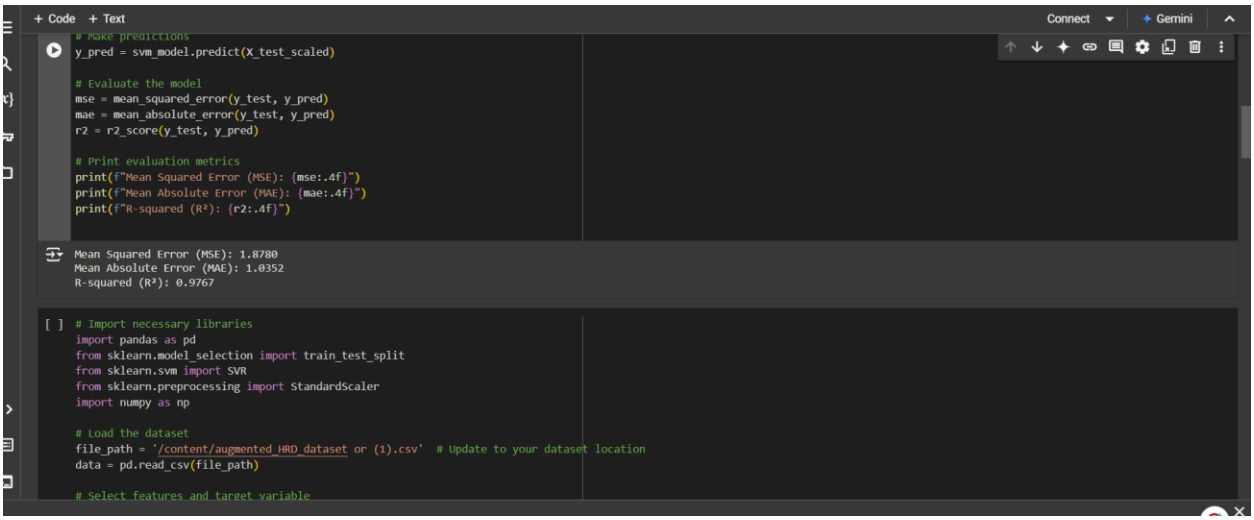
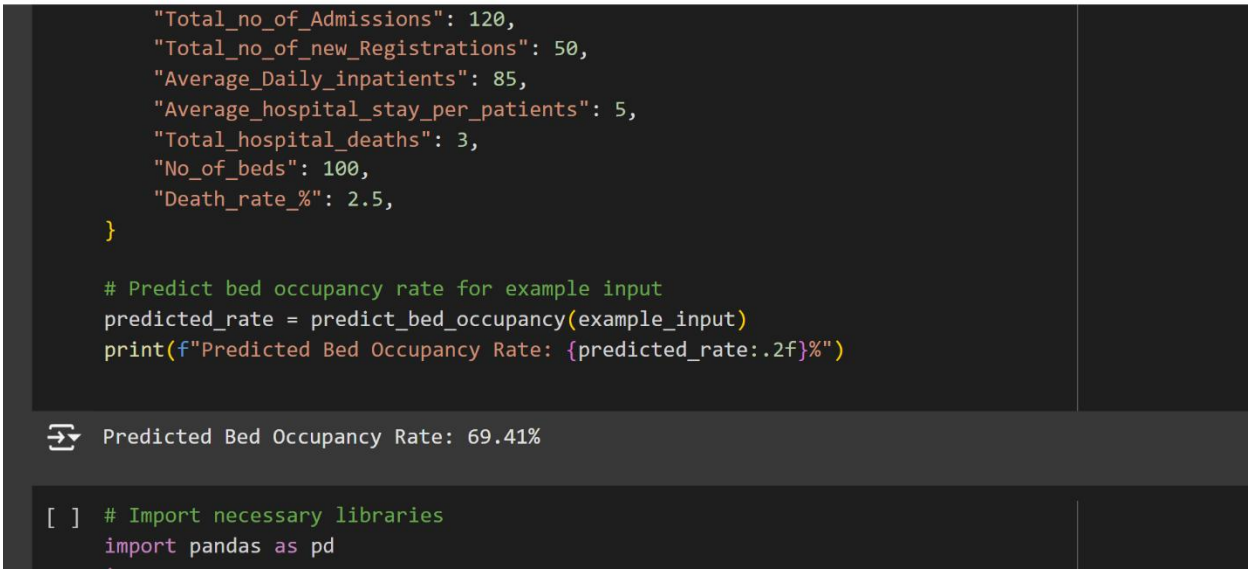
OUTPUT -



```
+ Code + Text                                                    Connect  Gemini

# Make predictions
y_pred = svm_model.predict(X_test_scaled)

# Evaluate the model
mse = mean_squared_error(y_test, y_pred)
mae = mean_absolute_error(y_test, y_pred)
r2 = r2_score(y_test, y_pred)

# Print evaluation metrics
print(f"Mean Squared Error (MSE): {mse:.4f}")
print(f"Mean Absolute Error (MAE): {mae:.4f}")
print(f"R-squared (R²): {r2:.4f}")

Mean Squared Error (MSE): 1.8780
Mean Absolute Error (MAE): 1.0352
R-squared (R²): 0.9767

[ ] # Import necessary libraries
    import pandas as pd
    from sklearn.model_selection import train_test_split
    from sklearn.svm import SVR
    from sklearn.preprocessing import StandardScaler
    import numpy as np

    # Load the dataset
    file_path = '/content/augmented_HRD_dataset or (1).csv'  # Update to your dataset location
    data = pd.read_csv(file_path)

    # Select features and target variable
```



```
        "Total_no_of_Admissions": 120,
        "Total_no_of_new_Registrations": 50,
        "Average_Daily_inpatients": 85,
        "Average_hospital_stay_per_patients": 5,
        "Total_hospital_deaths": 3,
        "No_of_beds": 100,
        "Death_rate_%": 2.5,
    }

    # Predict bed occupancy rate for example input
    predicted_rate = predict_bed_occupancy(example_input)
    print(f"Predicted Bed Occupancy Rate: {predicted_rate:.2f}%")

Predicted Bed Occupancy Rate: 69.41%

[ ] # Import necessary libraries
    import pandas as pd
```