COVID-19 CASES WITH PYTHON – TESTING

Test Case No	Test Case Scenario	Input	Expected Output	Output	Remarks
1	Importing libraries.	Libraries	All libraries are successfully imported	All libraries are successfully imported	Test case passed.
2	Importing and reading a valid CSV dataset.	Covid_19_cases4.csv	Successfully imports	Successfully imports	Test case passed.
3	Importing and reading a CSV dataset with incorrect file format.	Covid_19_cases4.pdf	Error message "Invalid file format" is displayed.	Error message "Invalid file format" is displayed.	Test case passed.
4	Checking missing values in a dataframe.	Dataframe	No missing values	0	Test case passed.
5	Checking for duplicates in a dataframe.	Dataframe	No duplicate values	0	Test case passed.

6	Drop unnecessary columns and set daterep as index.	Dataframe	Covid_data should have the unnecessary columns dropped and daterep set as the index.	Covid_data should have the unnecessary columns dropped and daterep set as the index.	Test case passed.
7	Finding the top five countries in terms of cases and visualizing them.	Dataframe	Top five countries in terms of cases visualized using a chart.	Top five countries in terms of cases visualized in a chart.	Test case passed.
8	Finding the top five countries in terms of deaths and visualizing them.	Dataframe	Top five countries in terms of deaths visualized using a chart.	Top five countries in terms of deaths visualized in a chart.	Test case passed.
9	Fit a gradientboostingregressor model on the training data.	Train_data	Model is trained successfully.	Model is trained successfully.	Test case passed.
10	Evaluate the model's performance using the mean_squared_error and r2_score functions, Print the root mean squared error and R2 score.	Y_test, y_pred	Print RMSE and R2_Score values.	RMSE and R2_Score values printed.	Test case passed.