Appendix

1. Packages to Install into anaconda prompt before running libraries

- **Xgboost**: conda install -c anaconda py-xgboost
- **Imbalanced-learn:** conda install -c glemaitre imbalanced-learn
- **Folium**: conda install -c conda-forge folium
- **Json**: conda install -c jmcmurray json
- **World-countries.json** : need to download this java script file to plot the world map

2. Exploratory Data Analysis (Visualisations)

Figure 2.1

Bar Chart of Companies Highest Chocolate Vendors

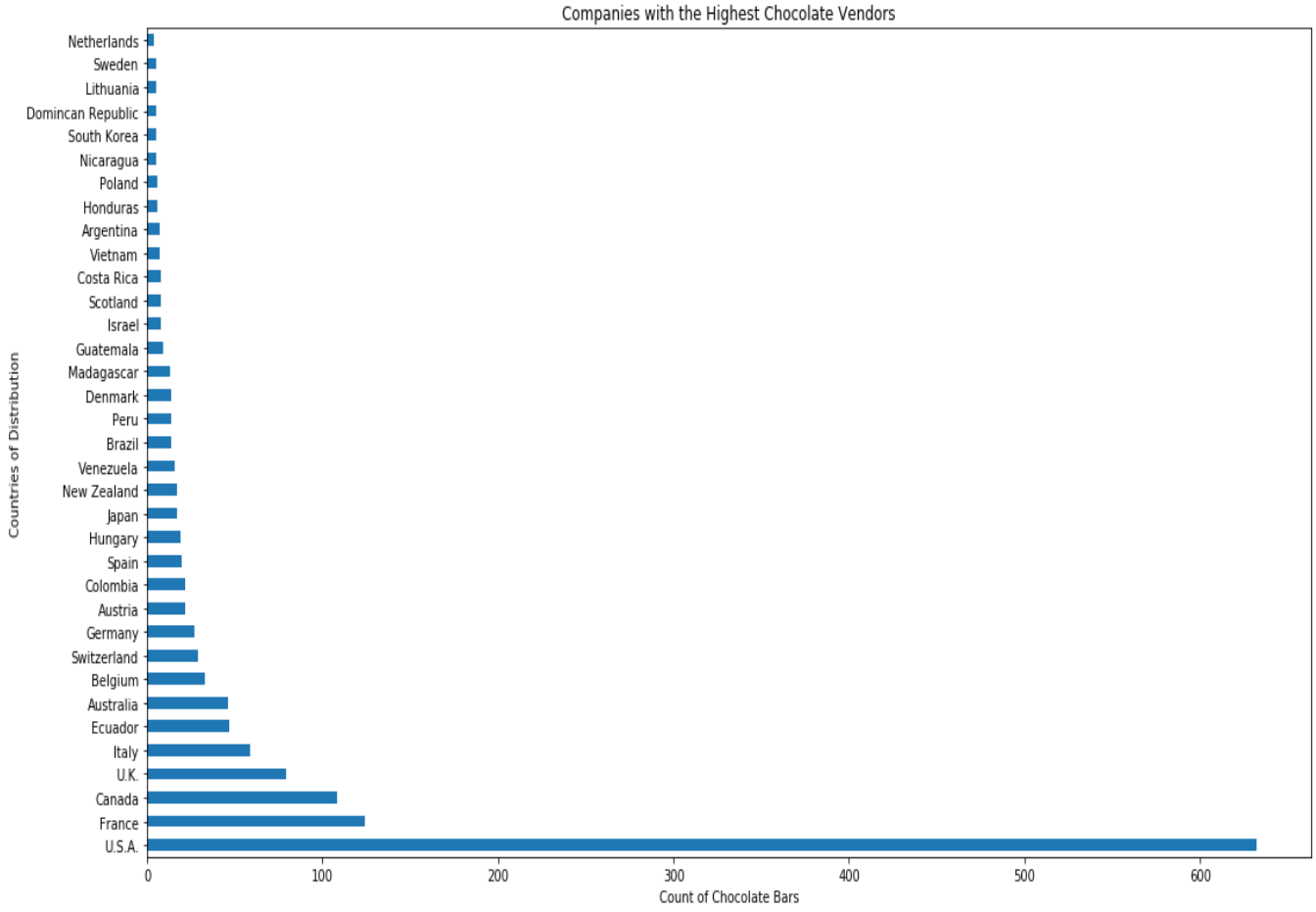
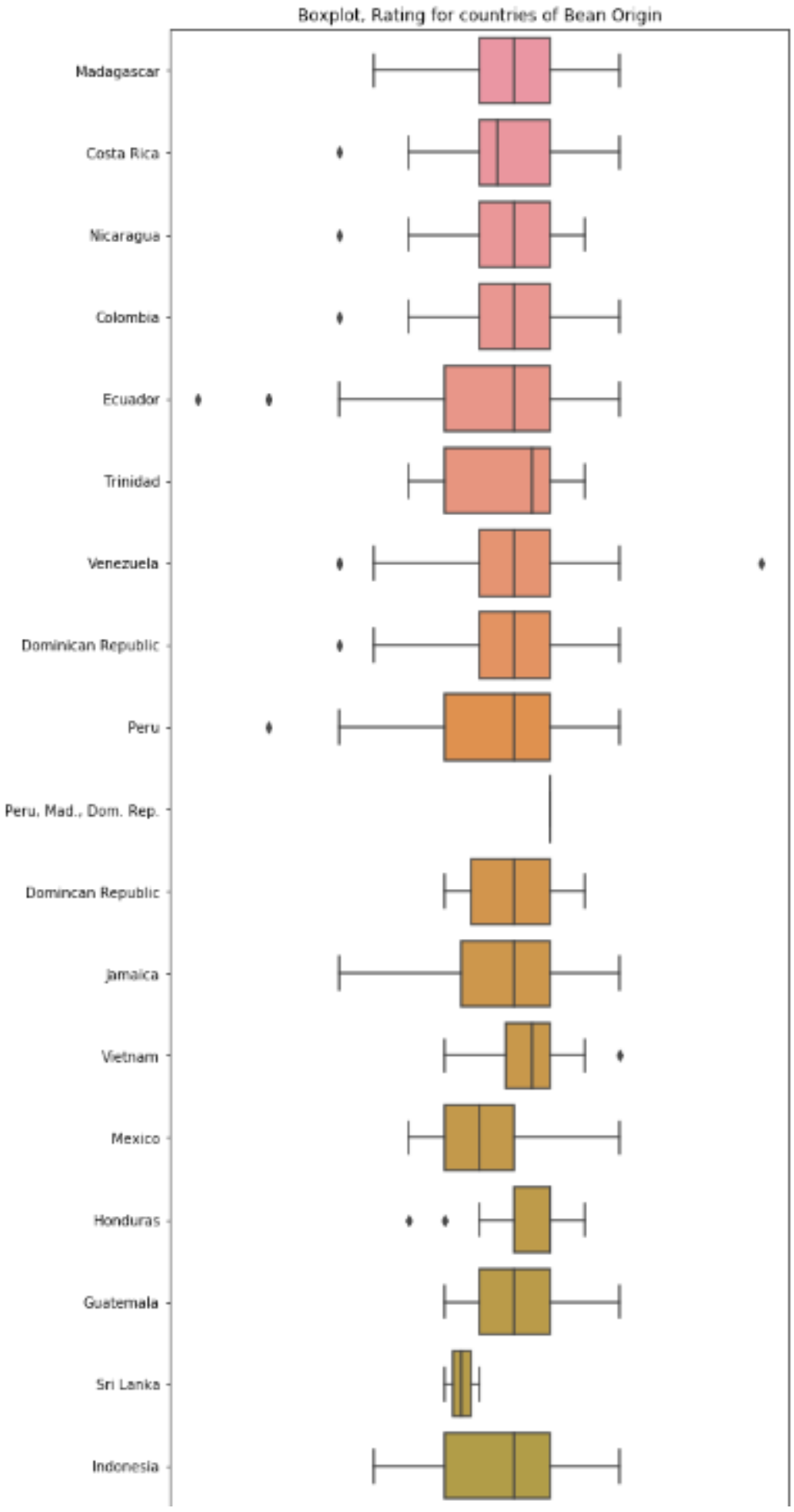
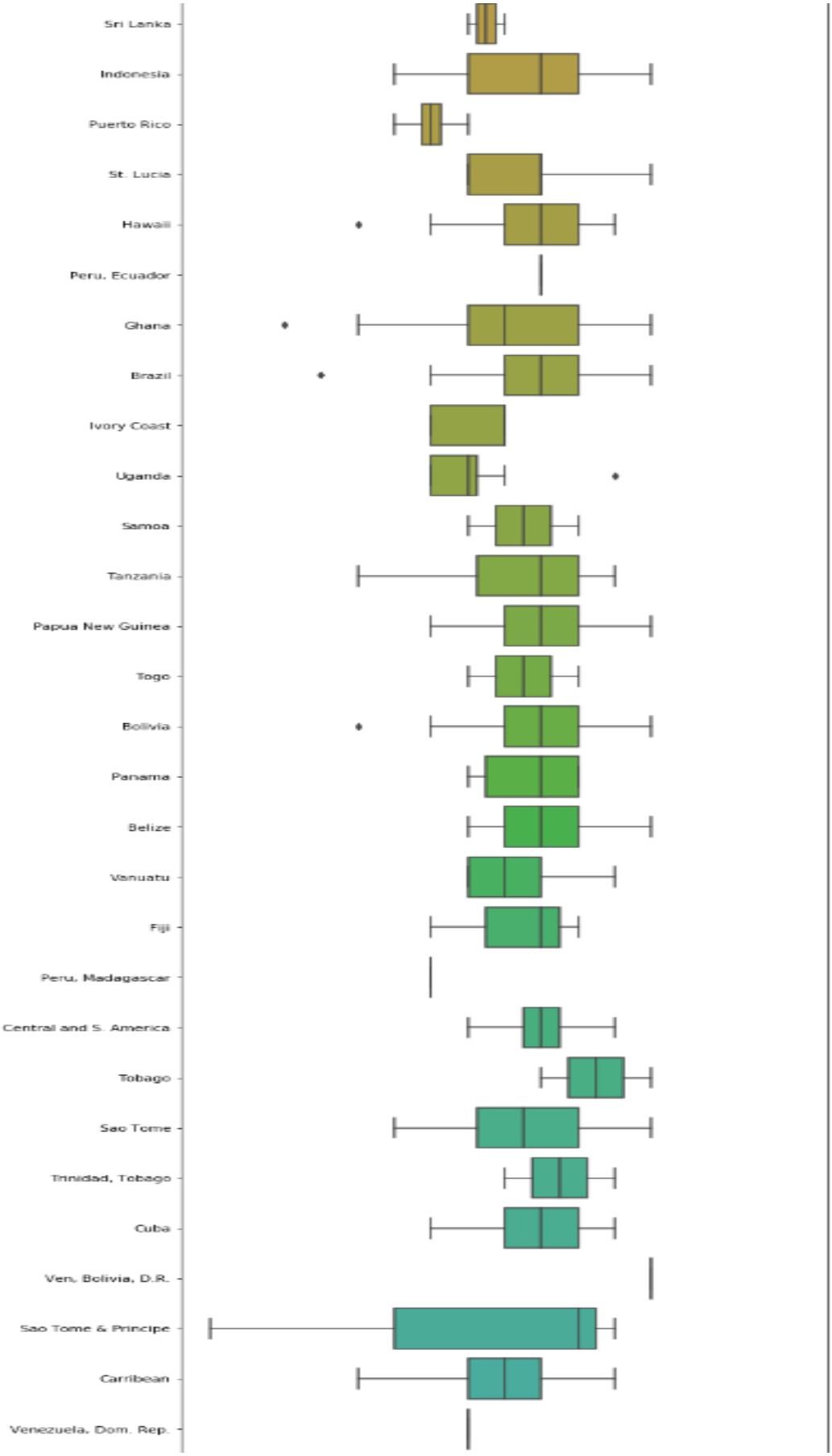
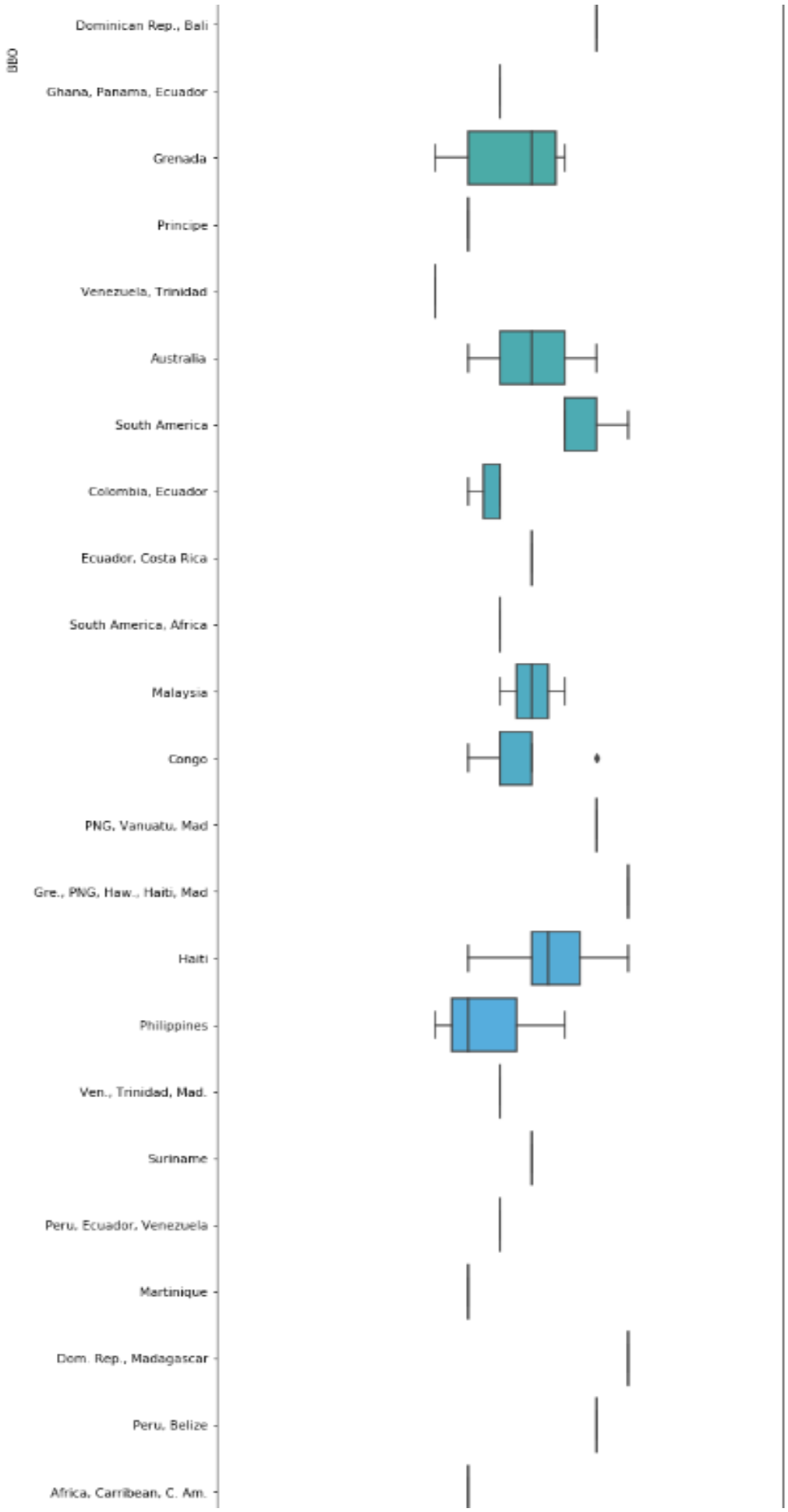


Figure 2.2

Boxplot, Rating of countries to Bean Origin


Boxplot, Rating for countries of Bean Origin
Madagascar
Costa Rica
Nicaragua
Colombia
Ecuador
Trinidad
Venezuela
Dominican Republic
Peru
Peru, Mad., Dom. Rep.
Domincan Republic
Jamaica
Vietnam
Mexico
Honduras
Guatemala
Sri Lanka
Indonesia


Sri Lanka
Indonesia
Puerto Rico
St. Lucia
Hawaii
Peru, Ecuador
Ghana
Brazil
Ivory Coast
Uganda
Samoa
Tanzania
Papua New Guinea
Togo
Bolivia
Panama
Belize
Vanuatu
Fiji
Peru, Madagascar
Central and S. America
Tobago
Sao Tome
Trinidad, Tobago
Cuba
Ven, Bolivia, D.R.
Sao Tome & Principe
Carribean
Venezuela, Dom. Rep.


OBO
Dominican Rep., Bali
Ghana, Panama, Ecuador
Grenada
Principe
Venezuela, Trinidad
Australia
South America
Colombia, Ecuador
Ecuador, Costa Rica
South America, Africa
Malaysia
Congo
PNG, Vanuatu, Mad
Gre., PNG, Haw., Haiti, Mad
Haiti
Philippines
Ven., Trinidad, Mad.
Suriname
Peru, Ecuador, Venezuela
Martinique
Dom. Rep., Madagascar
Peru, Belize
Africa, Carribean, C. Am.

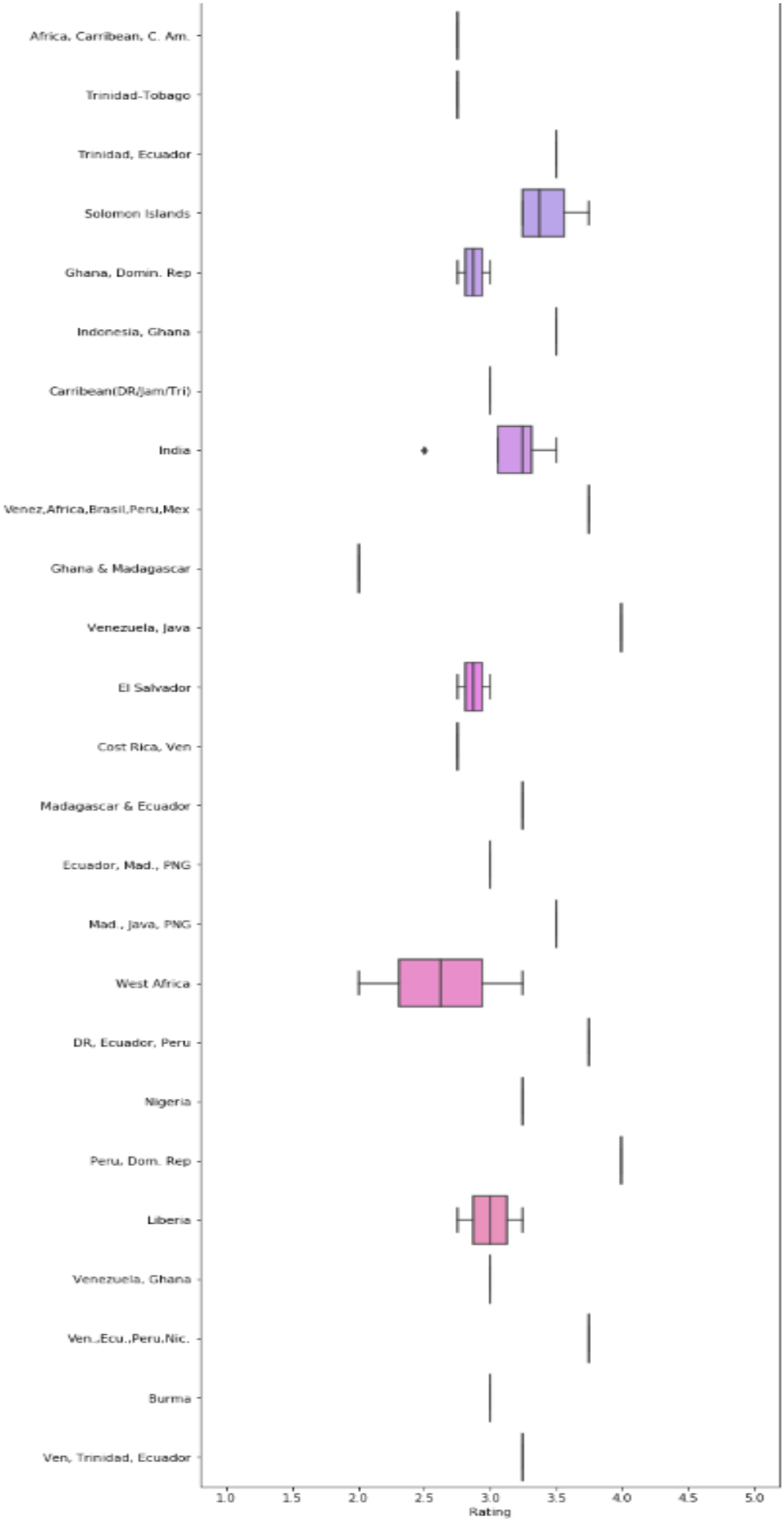

Africa, Carribean, C. Am.
Trinidad-Tobago
Trinidad, Ecuador
Solomon Islands
Ghana, Domin. Rep
Indonesia, Ghana
Carribean(DR/Jam/Tri)
India
Venez,Africa,Brasil,Peru,Mex
Ghana & Madagascar
Venezuela, Java
El Salvador
Cost Rica, Ven
Madagascar & Ecuador
Ecuador, Mad., PNG
Mad., Java, PNG
West Africa
DR, Ecuador, Peru
Nigeria
Peru, Dom. Rep
Liberia
Venezuela, Ghana
Ven.,Ecu.,Peru,Nic.
Burma
Ven, Trinidad, Ecuador
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
Rating

Figure 2.3

Count of Chocolate Bar Ratings

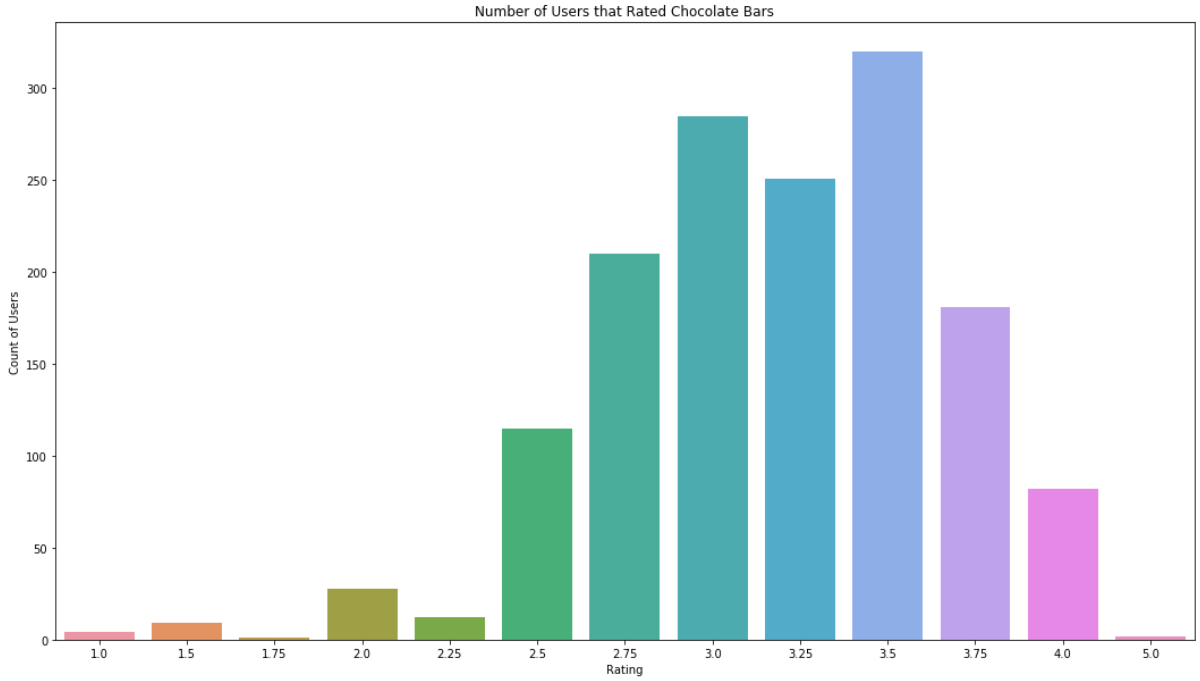


Figure 2.4

Density of Cocoa_Percent present in chocolate bars

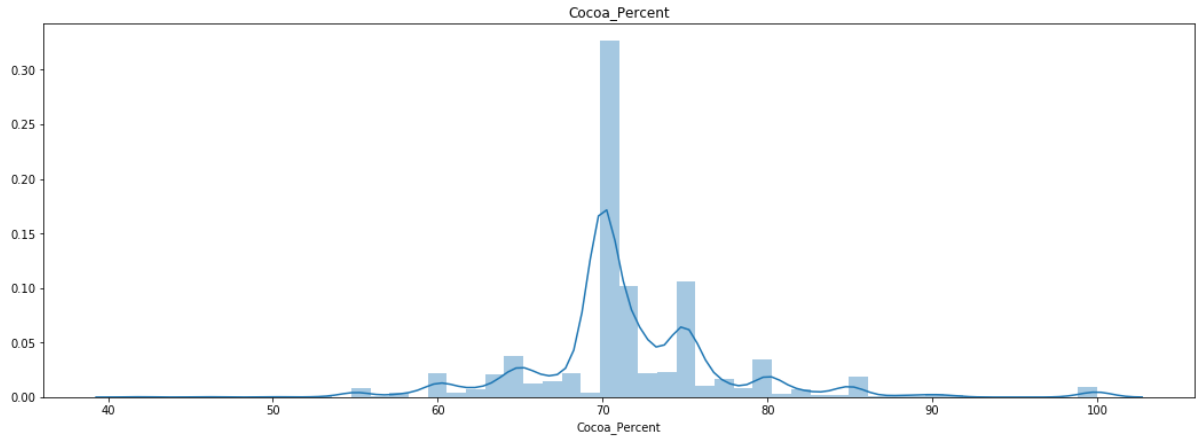


Figure 2.5

Boxplot to display ratings for Cocoa_Precent present in chocolate bars

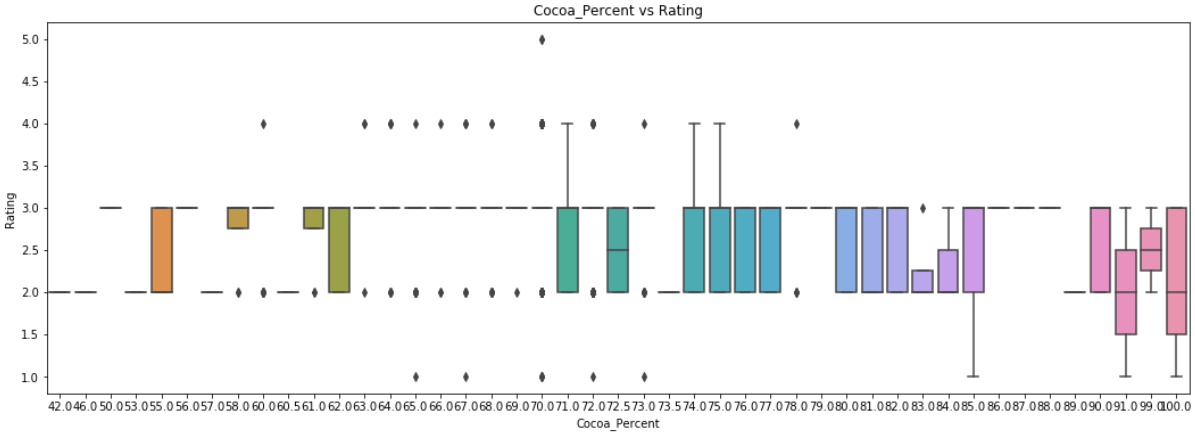


Figure 2.6

Heat map to display Broad Bean origin to company_location

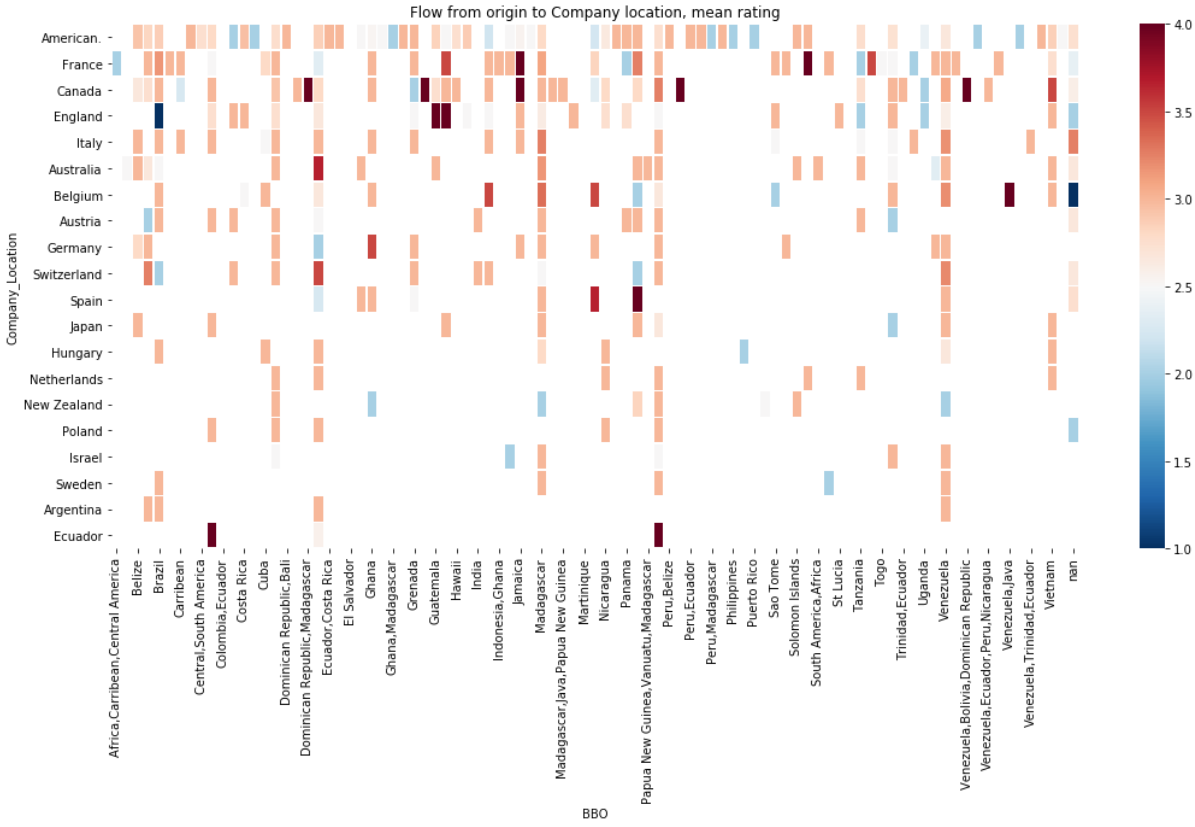
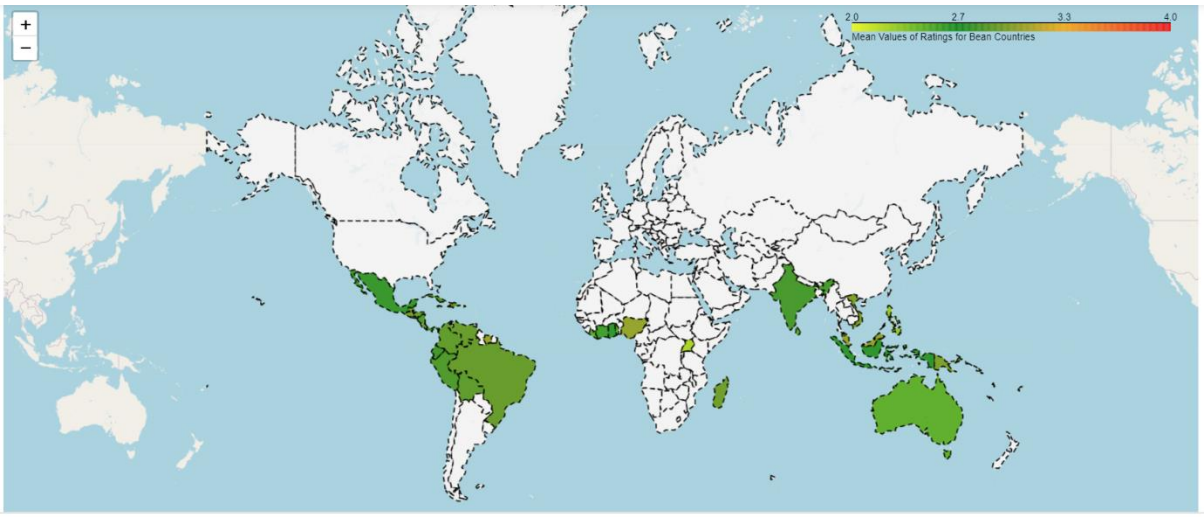
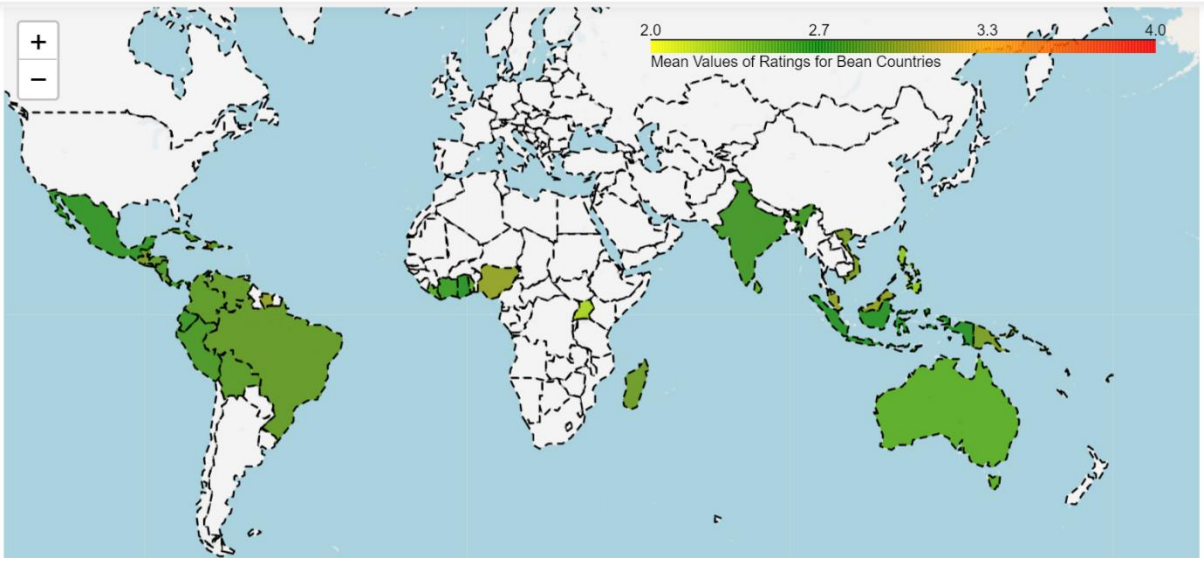


Figure 2.7

Folium map to display countries with best Beans in terms of ratings


+
−
2.0
2.7
3.3
4.0
Mean Values of Ratings for Bean Countries


+
−
2.0
2.7
3.3
4.0
Mean Values of Ratings for Bean Countries