National
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Configuration Manual

MSc Research Project
Data Analytics

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Configuration Manual

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1 Requirements

The code was wrote in python, therefore it would be necessary to have an environment capable of running python code.

We used the resources available in Google Colab[1] to do the research project.

We strongly recommend the use of Google Colab, since it only require a Google account and includes all of the necessary libraries to run the code.

1.1 Required Libraries

The libraries necessary to run the code are:

- numpy

- pandas

- tensorflow

- math

- matplotlib.pyplot

- random

- statsmodels.api

2 Installing Libraries

All the required libraries to run the code properly are included in Google Colab, therefore, there is no need to install any additional library.

3 Run the Code Using Google Colab

In this section we will show how to upload the .ipynb file and the dataset to Google Colab.

The first step consists of uploading the file into Google Colab as shown in Figure 1.

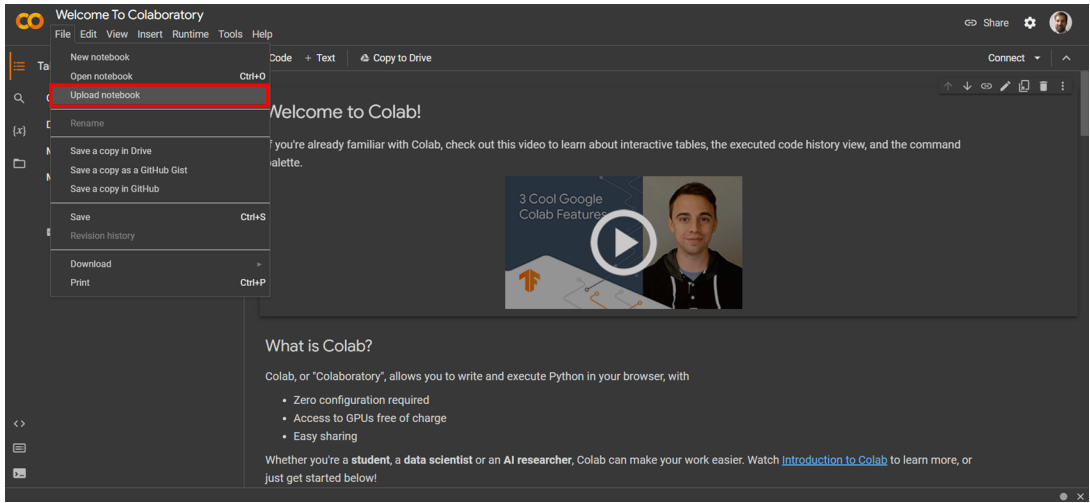[1] `https://colab.research.google.com/notebooks/intro.ipynb`

Figure 1: Uploading file in Google Colab

Once uploaded, the file will open automatically and we will change the hardware accelerator by opening the menu as shown in Figure 2 and selecting the hardware accelerator as shown in Figure 3.
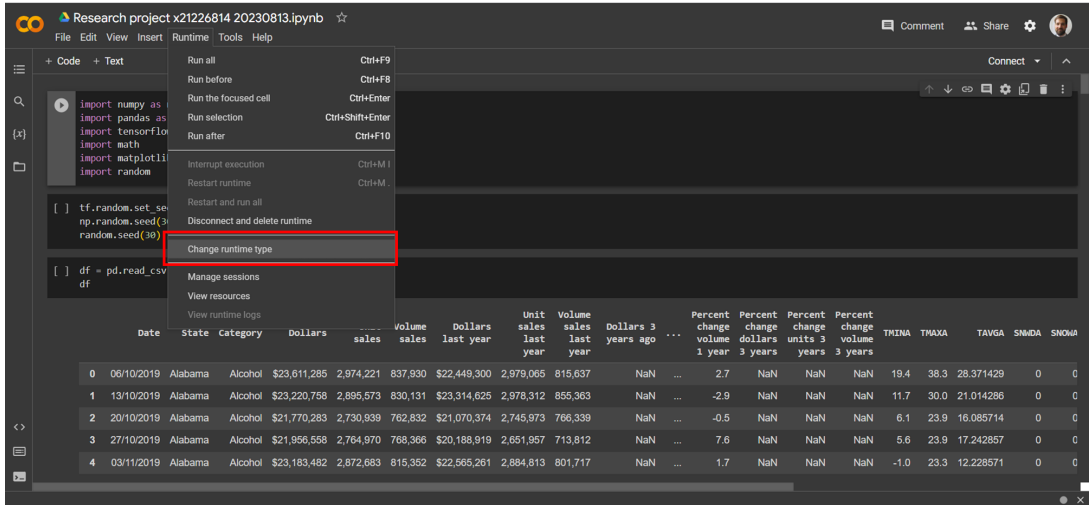

Figure 2: Open configuration to change the runtime type

Then we will connect, as shown in Figure 4 to be able to use the Google Colab resources and upload the dataset by selecting the "Upload to session storage" button, as shown in Figure 5, and selecting the csv file containing the dataset.

Finally we will run the code as shown in Figure 6 and wait for all the cells to finish runing to evaluate the results.
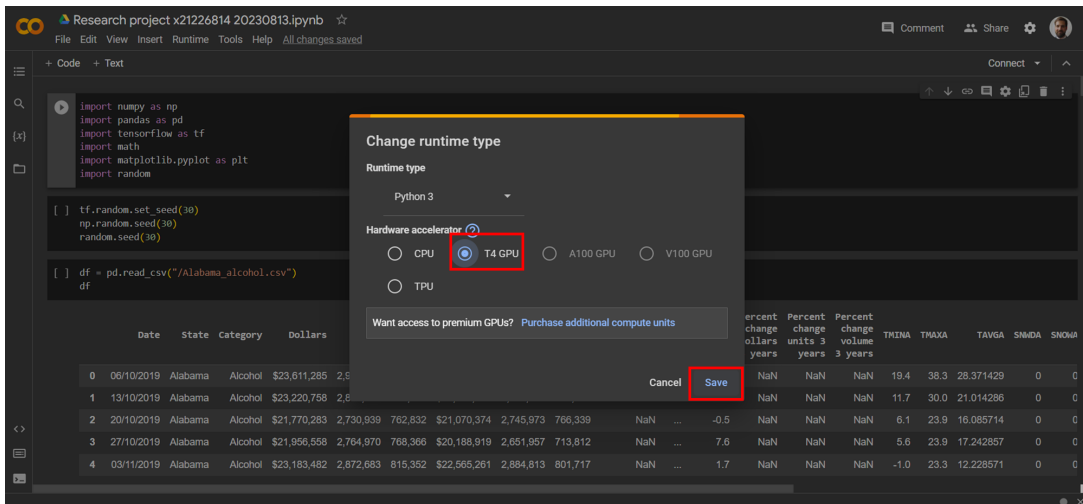
Figure 3: Changing the hardware accelerator to GPU
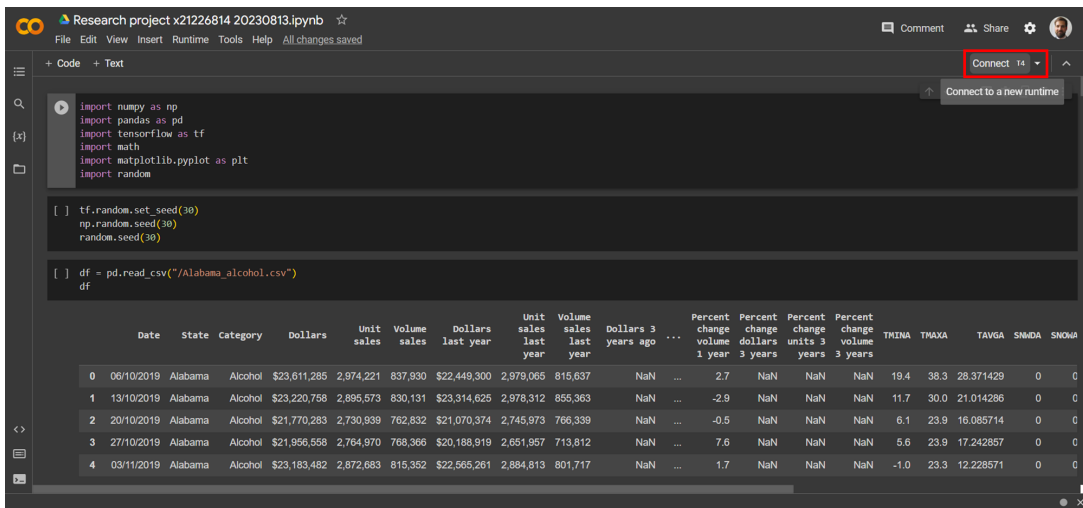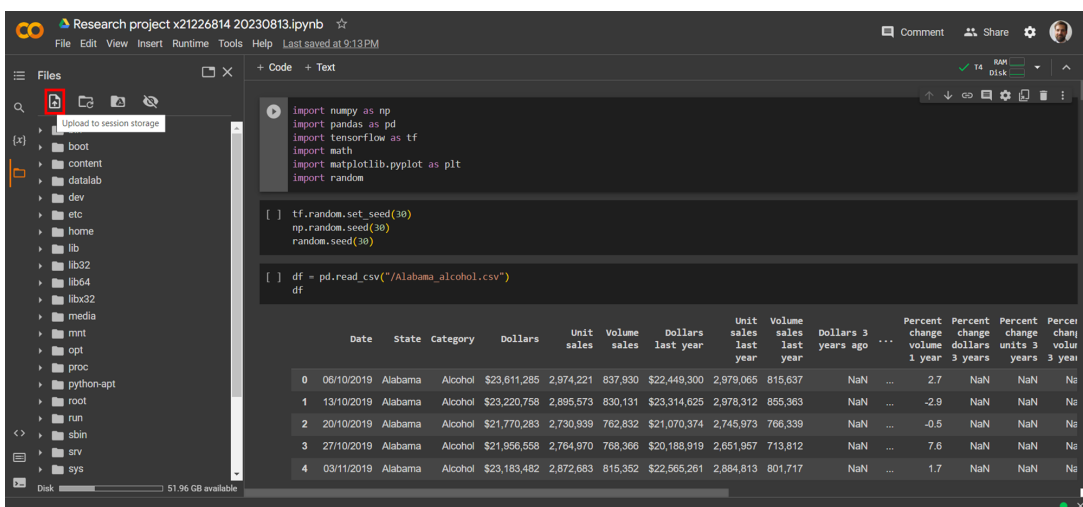

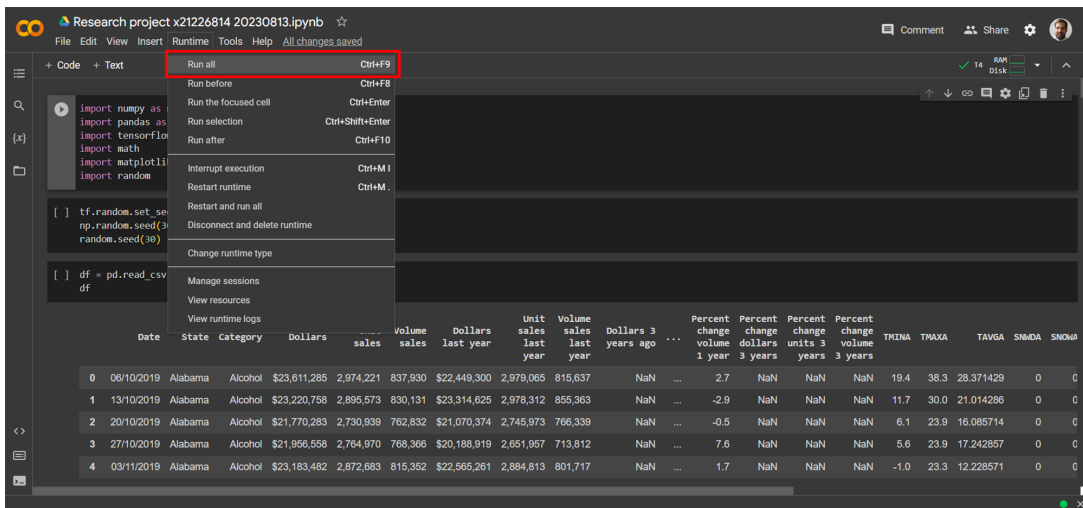Figure 4: Connect button

Figure 5: Upload to session storage

Figure 6: Run all button