

**PROCESS:** download the data set

### **Guiding Questions**

what tools are you choosing and why? **Sheets to Clean up Data, R to Analyze & Graphs**

have you ensure your data's integrity? **Yes, I looked over the accuracy. completeness, and consistency of data**

what steps have you taken to ensure that your data is clean? **Check if Empty, Removed any Duplicates**

how can you verify that your data is clean and ready to analyze? **Having a checklist to follow**

have you documented your cleaning process so you can review and share those results?

### **Key tasks**

1. Check the data for errors
2. Choose your tools
3. Transform the data so you can work with it effectively.
4. Document the cleaning process

### **Deliverable**

Documentation of any cleaning or manipulation of data

Verification was not needed because this data was taken from verified public data taken from the stock market. Check the Data with personal Checklist, Null Values, Duplicated, Misspellings. Change Logs are within Sheets

Since Data is nominal errors were harder to come by  
It was easy, not error

Verification, data-cleaning effort was well excuted, data accurate and reliable

### **Reporting Communications**

#### **Reports**

- Changelog
- Find out Nulls
- Misspellings
- Big picture view, focising on business problem,

1. Consider buisness problem,
2. Consider goal
3. Consider the data - Do numbers makes sense

1. Right-click the cell and select Show edit history.
2. Click the left-arrow < or right arrow > to move backward and forward in the history as needed.