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shell commond:

npx http-server

### 1. Introduction

Remake William Playfair's Import-export visualization (<a href="https://www.historyofinformation.co">https://www.historyofinformation.co</a> m/image.php?id=3374) by using China's service import and export volume data over the years. This line chart not only clearly shows how much Chinese imports and exports have increased over time (yearly), but also directly shows whether trade is in surplus or deficit.

## 2. Brief description of dataset(s) used

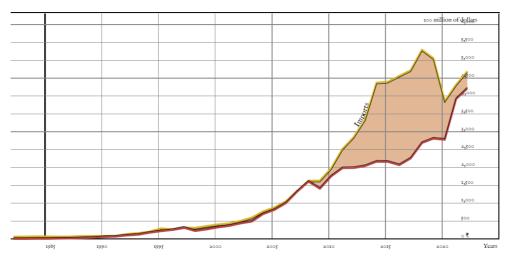
Source: <a href="http://data.mofcom.gov.cn/fwmy/overtheyears.shtml">http://data.mofcom.gov.cn/fwmy/overtheyears.shtml</a>

Description of column fields: Time, China's import and export, China's export, China's import.

Name	Туре	Cardinality/Range	Notes
Time	Ordinal	1982-2022	41 in total.
China's import and export	Quantitative	47-8891	The sum of China's export and China's import. Amount unit: hundreds of millions of US dollars.
China's export	Quantitative	27-4241	Above 0. Amount unit: hundreds of millions of US dollars.
China's import	Quantitative	20-5250	Above 0. Amount unit: hundreds of millions of US dollars.

## 3. Describe visual encoding of the visualizations you have produced.

#### CHART of all the IMPORTS and EXPORTS to and from CHINA From the Year 1982 to 2022



The Bottom line is divided into YEARS, the Right hand line into \$50 billion each.

A D<sub>3</sub> chart based on the work of William Playfair
Source: Export Import MINISTRY OF COMMERCE PEOPLE'S REPUBLIC OF CHINA

Published as the Act directs. 10.<sup>th</sup> Mar.<sup>ch</sup> 2023

Reference: <u>HarryStevens</u>

The entire visualization is a double line graph. The horizontal axis is divided in ascending order by year, with each year divided into one square, from 1982 to 2022. On the vertical axis, deposits are divided in ascending order, from 0 to 600 billion dollars with 50 billion dollars divided into one square. The yellow line shows imports and the red line shows exports. The shaded area between the two lines is the difference between imports and exports.

## 4. References of resources you used, e.g., papers & articles you read, websites you found datasets at, etc.

datasets: http://data.mofcom.gov.cn/fwmy/overtheyears.shtml

code: https://gist.github.com/HarryStevens/6fb5a3c76246f542fecede554325cadf

# 5. Pre-processing: describe why and how you did pre-processing, cleaning of any of the datasets if you had to do so.

Extract the year and its corresponding import and export amount by python from the source data table and import it into this visual data table.

## 6. Any other comments or information you may have

Libraries: <u>d3.js</u>, <u>jQuery</u>.