



DATA PROGRAMMING

FINAL PRESENTATION

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AGENDA



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ABOUT US

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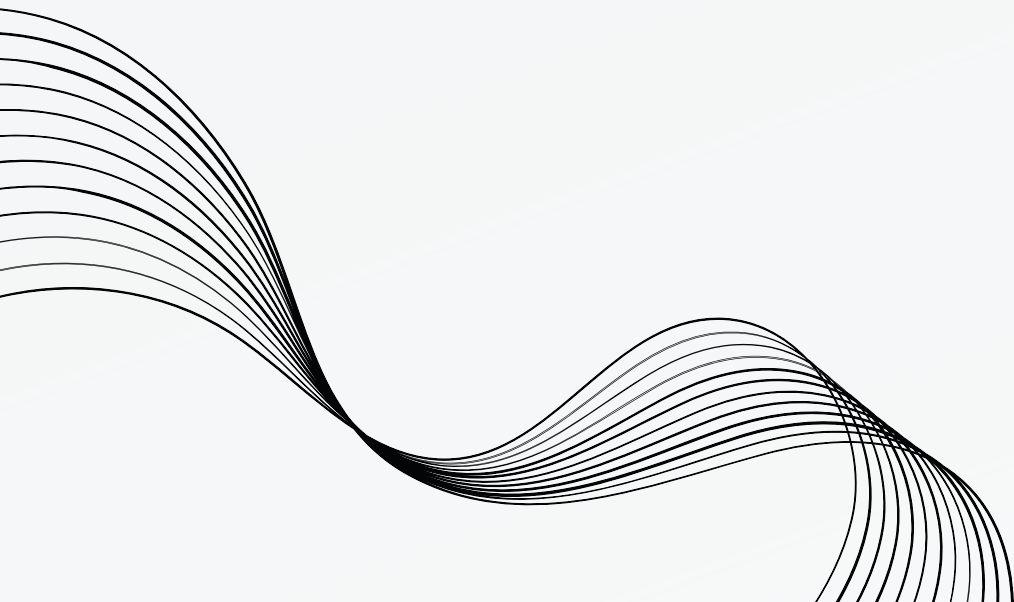
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PROJECT SUMMARY

The project is divided into 5 parts

Data acquisition from a URL

- Data were retrieved from the below API URL, which contains Nobel Prizes from the Years 1901 – 2022, in JSON Format.
- <https://api.nobelprize.org/v1/prize.json>

Data storing in Mongo DB

- To store the JSON data from the URL to the MongoDB collection, a new Database collection was created in Mongo DB.

Fetching data into Python Code

- Connect to the MongoDB server using Python code and print the data into the console.

Use Flask for creating a Web Application

- **Note:** We had an issue in presenting JSON data from MongoDB into Google Charts so we stored the data in Excel and retrieved it from the Excel File to create a Google chart dashboard.

Creating a Google Charts Dashboard using Javascript

- Creating Html files for representing data in the following charts:
 - Table Chart to present – Grand Total of Nobel Prizes Won by Category by Year
 - Bar Chart to present – Total Number of Prizes Won by Category
 - Line Chart to present – Total Number of Prizes Won by Year



DATASET DESCRIPTION

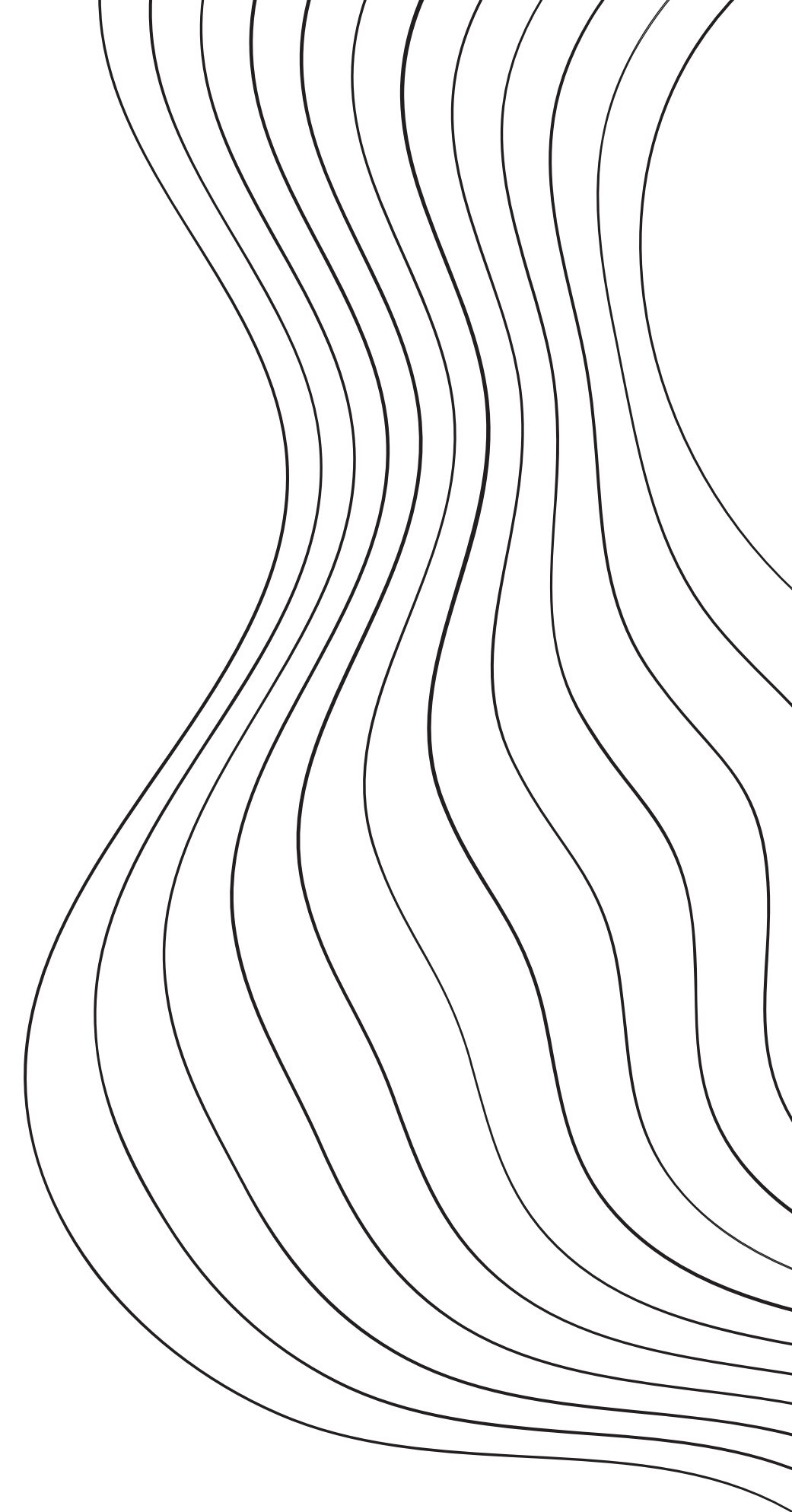
The Nobel prize dataset is scrapped from nobelprize.org, revolves around Nobel Prizer laureates from year 1901 to 2022 across six categories, extending their motivation regarding the prize. The six categories are Chemistry, Physics, Peace, Medicine, Literature, and later-on added Economics. The dataset was further cleaned and sorted for better analysis.

Source: <https://api.nobelprize.org/v1/prize.json>

Volume: 1038 records, 7 Unique Attributes

Range: 1901 – 2022

Attributes: Year, Laureates, Category, Motivation





RESEARCH QUESTIONS

In which Category has the Nobel Prize been won the most?

Which year has the most grants for Nobel Prize award?

What is the total number of Nobel Prizes granted till the year 2022?

EXECUTION PLAN

We followed the below steps to present our data into a web browser using MongoDB, Python, Excel, Flask Framework, and Google Charts.

Acquisition of
data source from
a URL

STEP 1

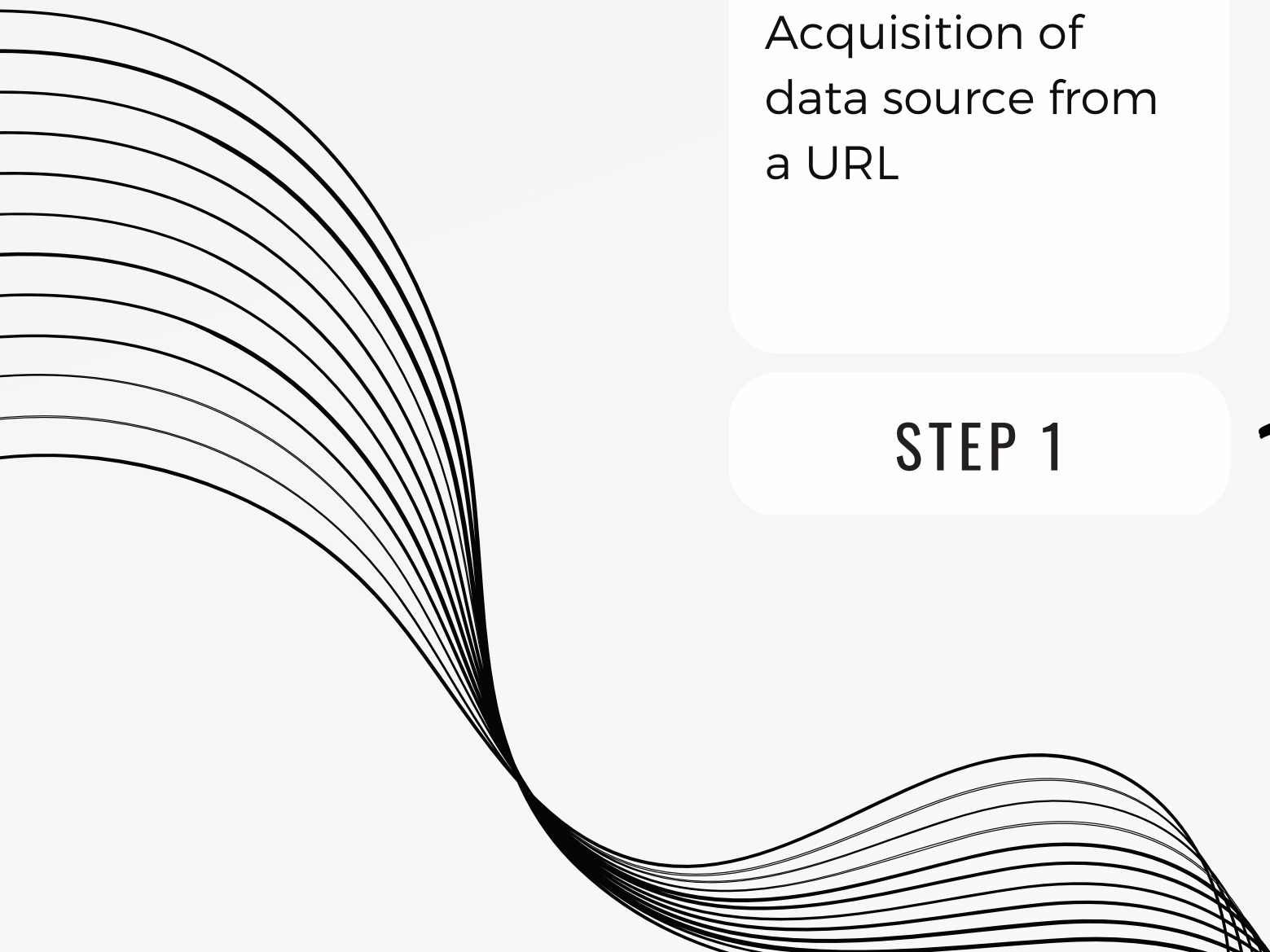
Storing acquired
data in MongoDB
database.

Moved to Excel

STEP 2

Displaying results
on WebSite using
Python Flask and
Google Charts

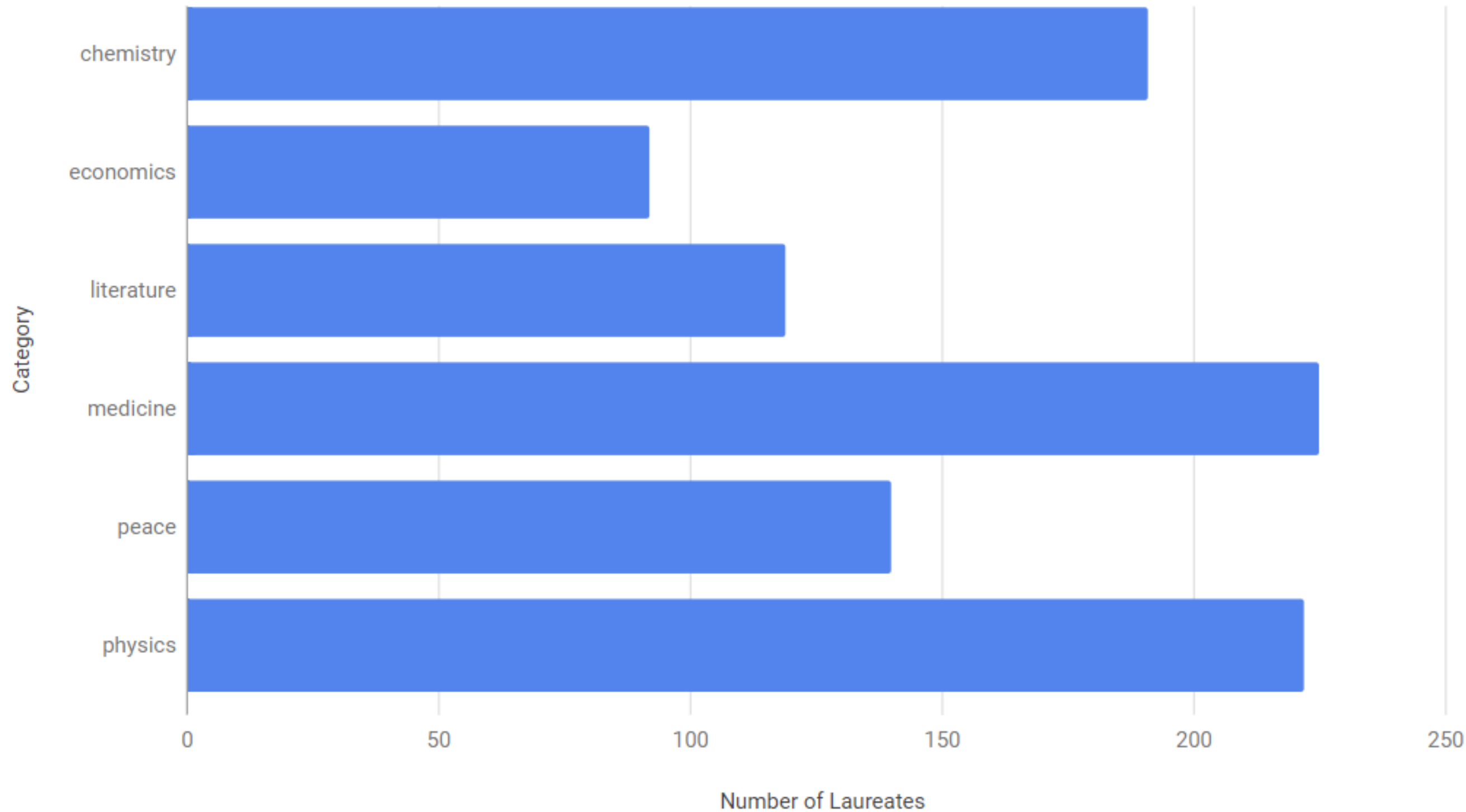
STEP 3



DEMONSTRATION

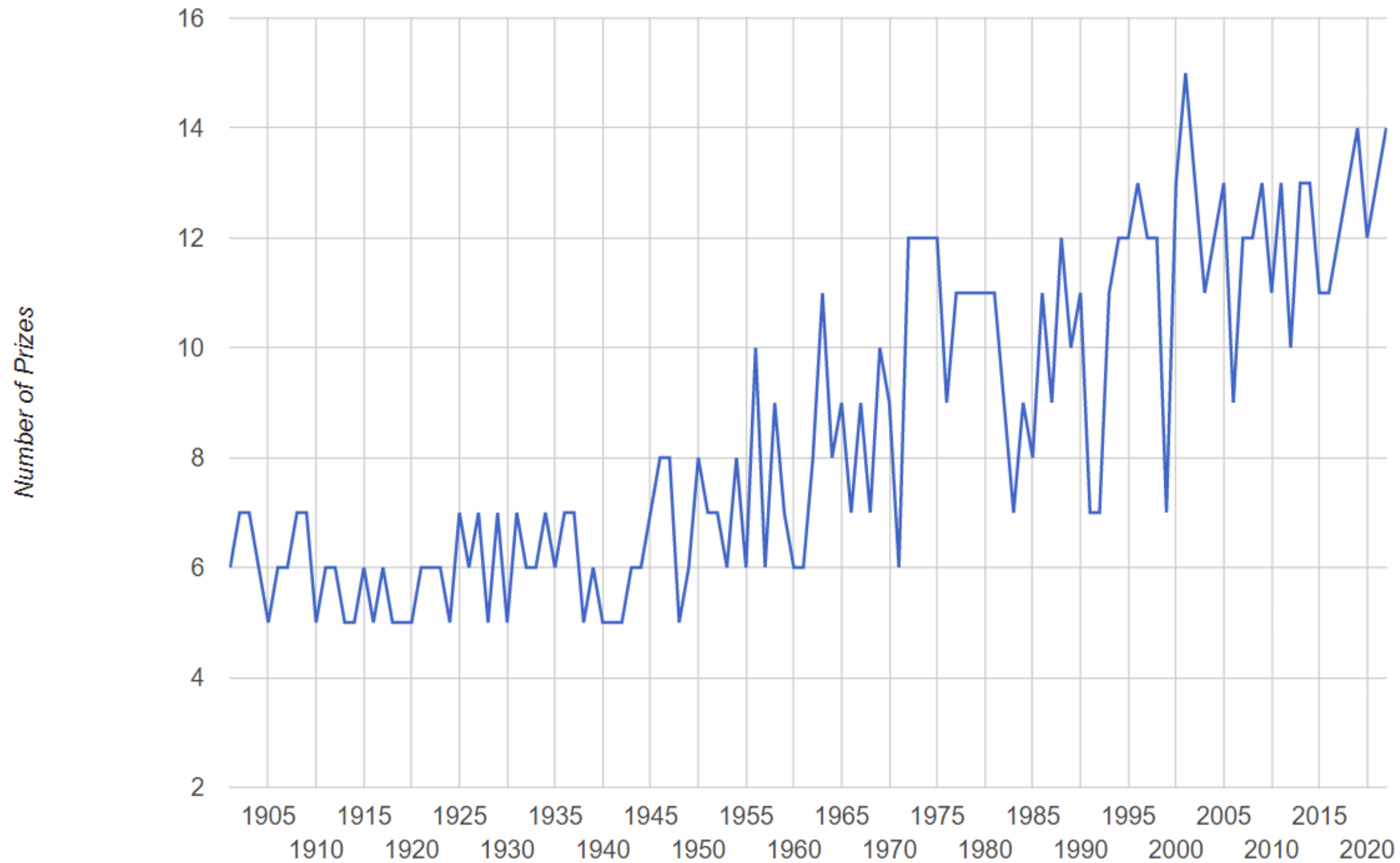
In which Category has the Nobel Prize been won the most?

Number of Nobel Laureates by Category



DEMONSTRATION

Which year has the most grants for Nobel Prize award?



DEMONSTRATION

What is the total number of Nobel Prizes granted till the year 2022?

Category	Count by Year
chemistry	199
economics	92
literature	126
medicine	234
peace	159
physics	228
Grand Total	1,038

CONCLUSION



THANK YOU!

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