Data Trends in Coding

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EXECUTIVE SUMMARY

The data field is ever growing with SQL being one of the most sought out coding languages, ranking in the top ten coding languages to learn and also being one of the most versatile to date.

Future opportunities in SQL and data are ever growing, and the demand for data analysts makes it one of the best emerging fields.

INTRODUCTION

- In a world with more and more data, the task of cleaning, cleaning, and understanding the trends inherent in its value is a growing and much sought after position.

- In this work, we hope to go over not only what a data analyst life entails, but to also show the positive trend in data job possibility as well as showing how data science roles compare to other programming languages.

METHODOLOGY

The data was gathered from a number of sites, most lent by the IBM Developer course. This included government surveys, GitHub links, publicly available data, and data from larger corporations.

The available data was cleaned and sorted to make the best of its use. Null values were removed, and the data was sorted into tangible and actionable items.

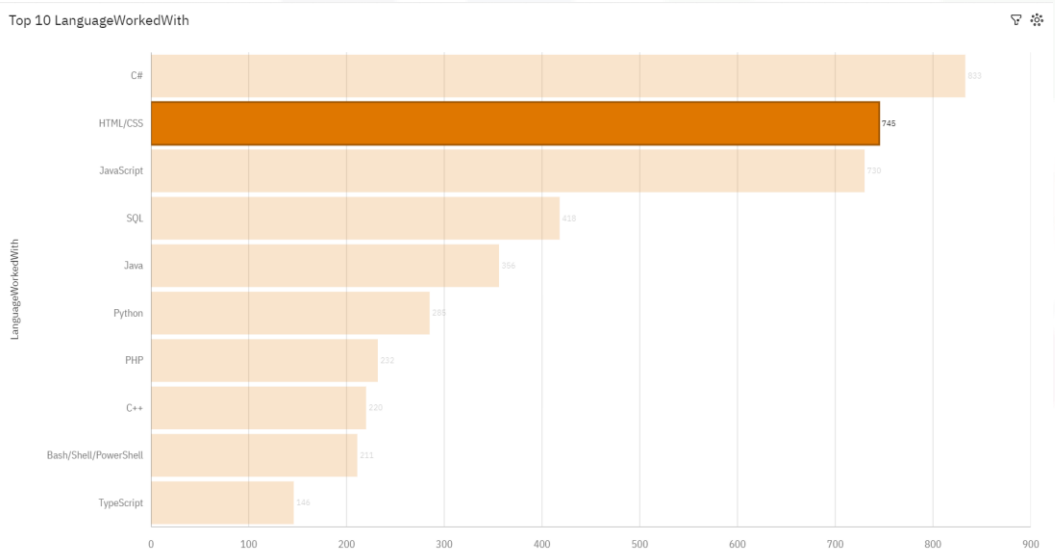
RESULTS

The following were notable results of the process:

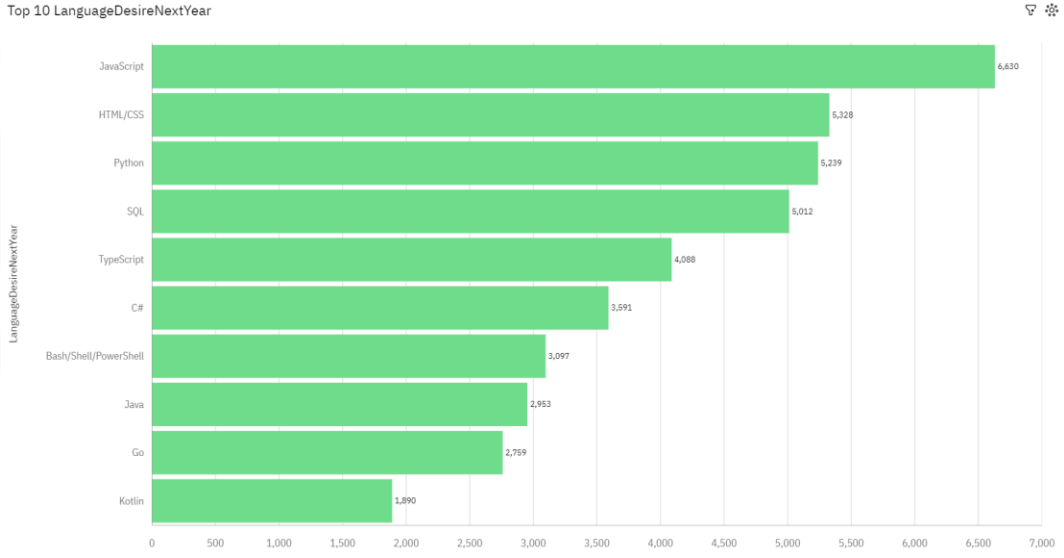
- SQL is one of the top ten languages worked with
- SQL is one of the top ten languages others want to know
  - MYSQL is the top database language used
  - PostgreSQL is one of the SQL variants most users wish to learn
- Most coders are between the age of 24-34 years old
- Most coders identify as male, with over 93.5% of responders saying so
- Coders can be found around the world
- Most Coder’s have a Bachelor's Degree

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



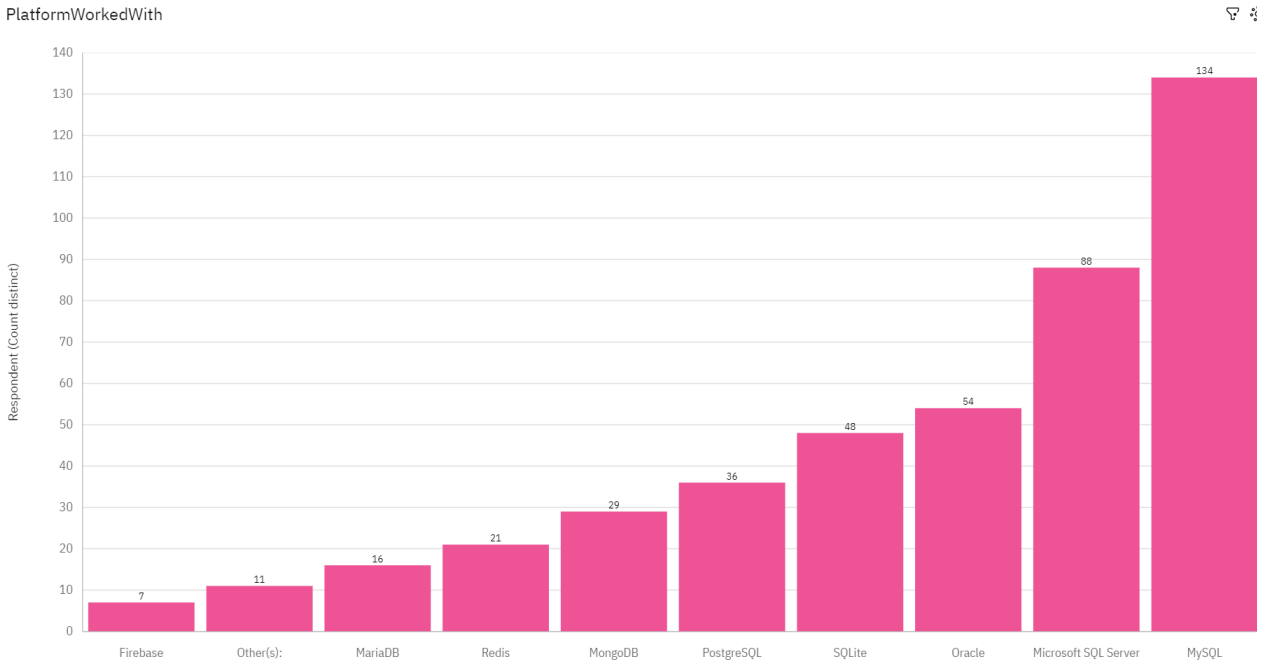
PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Implications

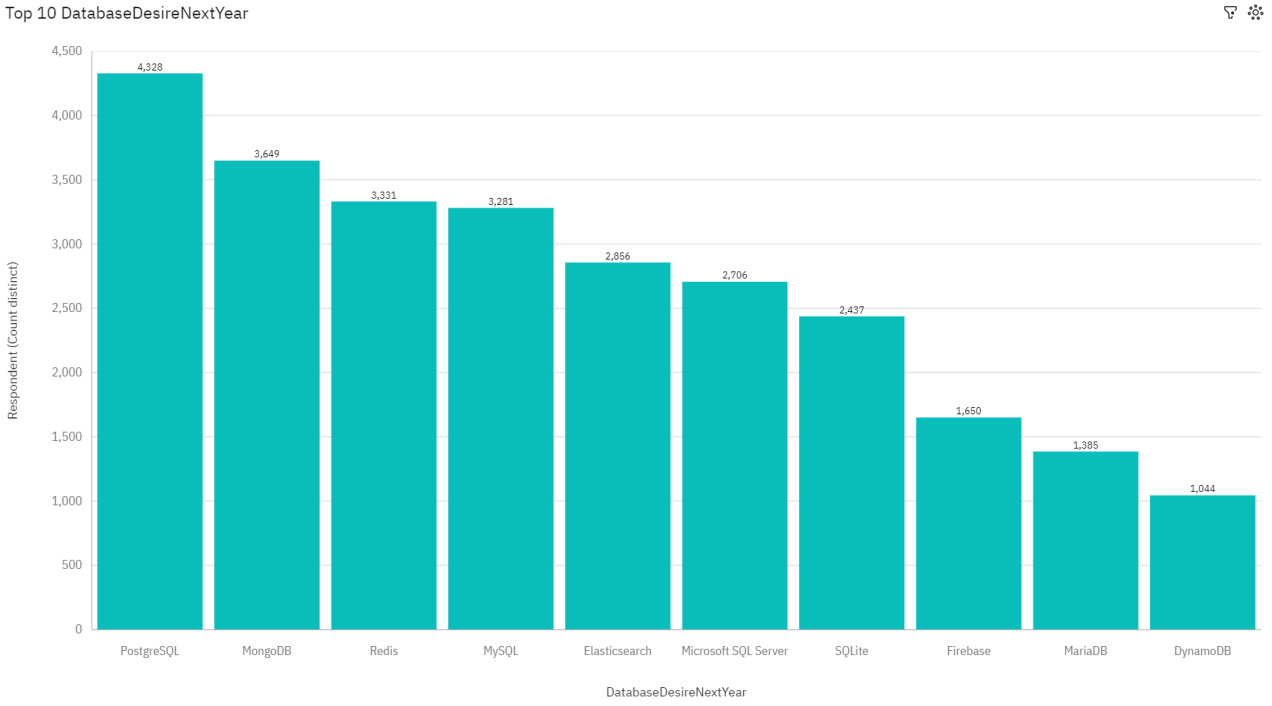
- SQL and Python will consistently grow in need in the future
- The need for data analysts will increase with time

DATABASE TRENDS

Current Year



Next Year



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SKILLS NETWORK

DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

MYSQL is the most used database language

More than 1/2rd of database languages include SQL

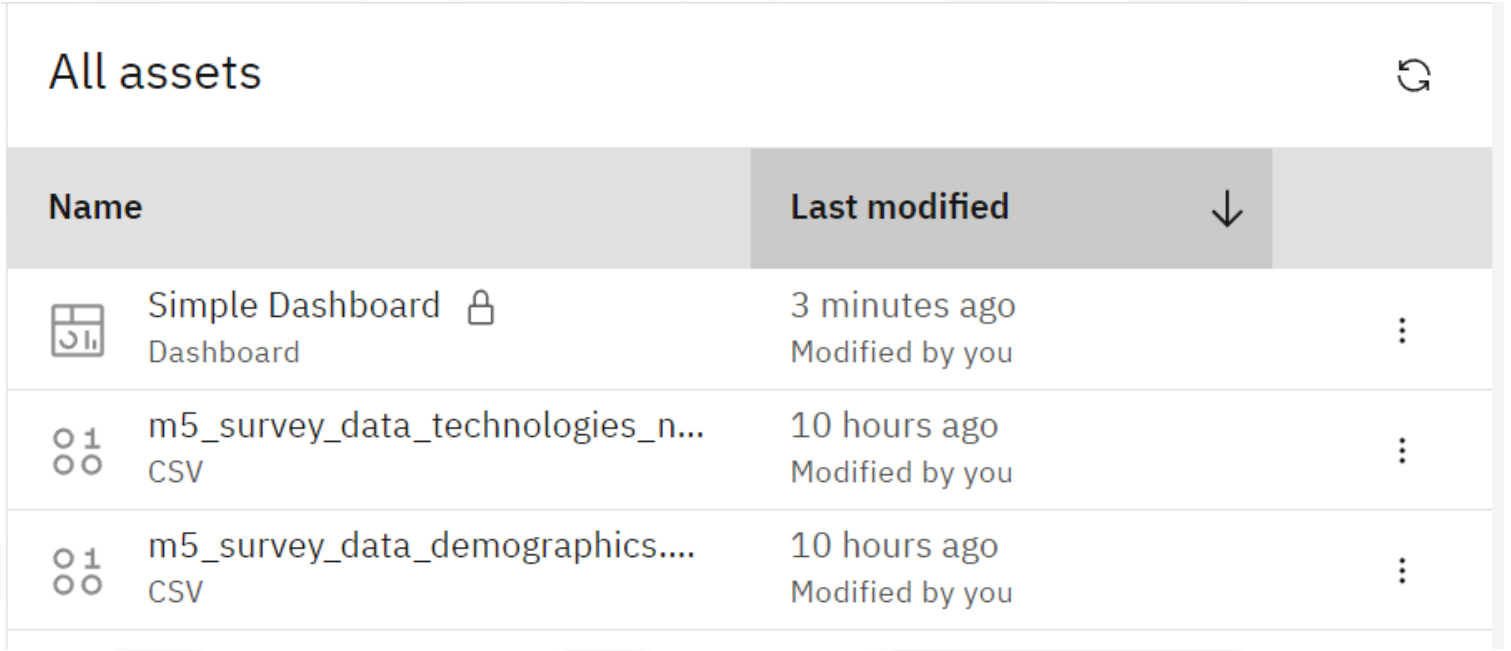
PostgreSQL is the most desired SQL variant

Implications

- MYSQL will continue to grow in use due to its popularity
- PostgreSQL will continue grow in use over the next few years

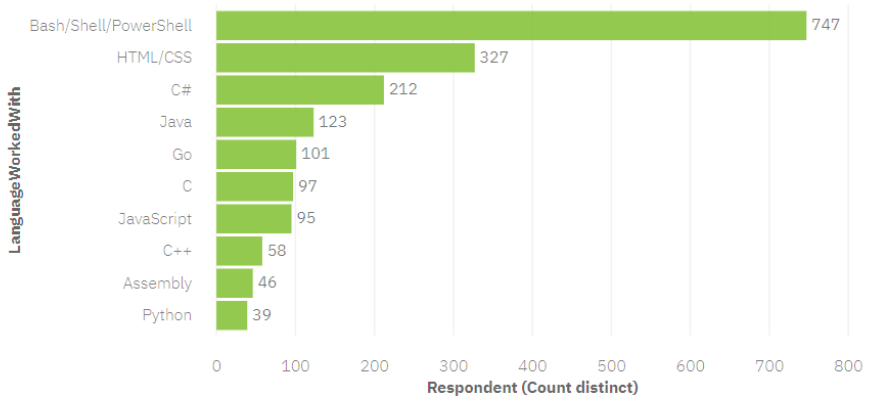
DASHBOARD Link

Dashboard Link

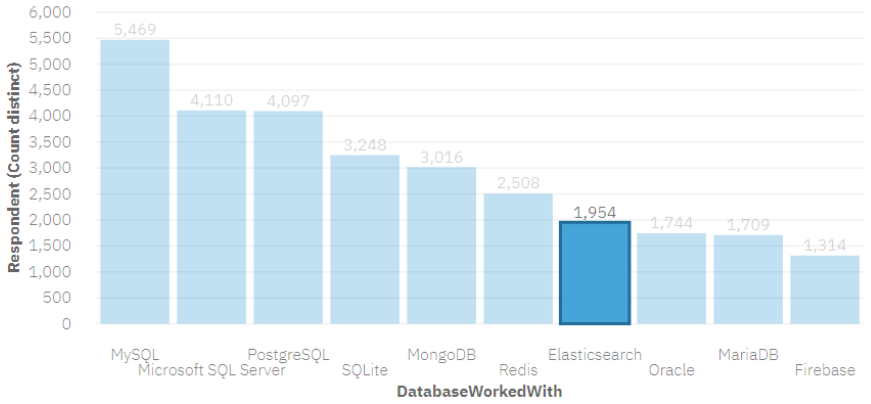


DASHBOARD TAB 1

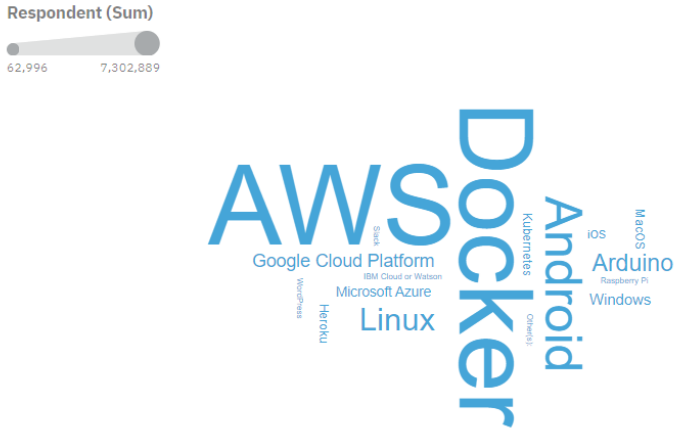
Top 10 LanguageWorkedWith



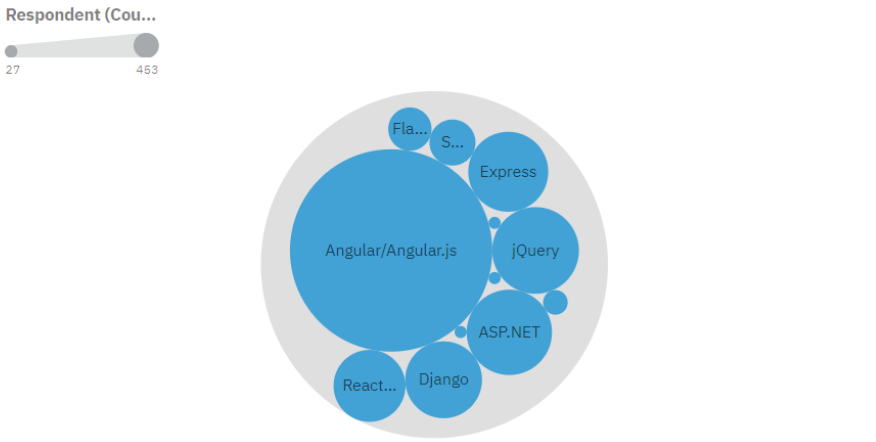
Top 10 DatabaseWorkedWith



PlatformWorkedWith



Top 10 WebFrameWorkedWith



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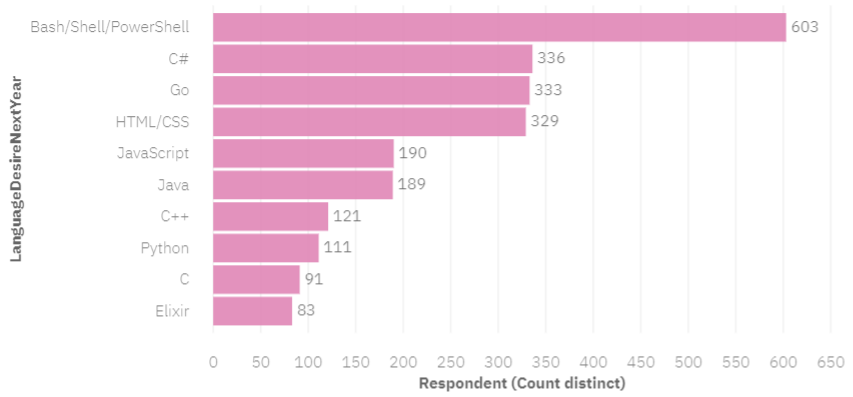
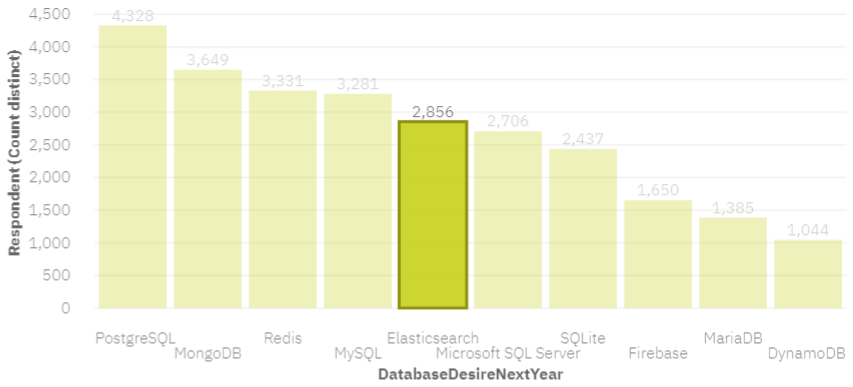
SKILLS NETWORK

DASHBOARD TAB 2

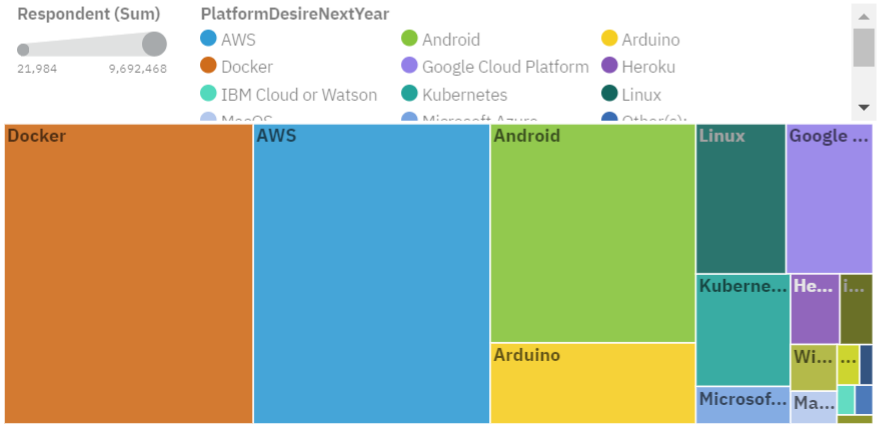
Top 10 LanguageDesireNextYear



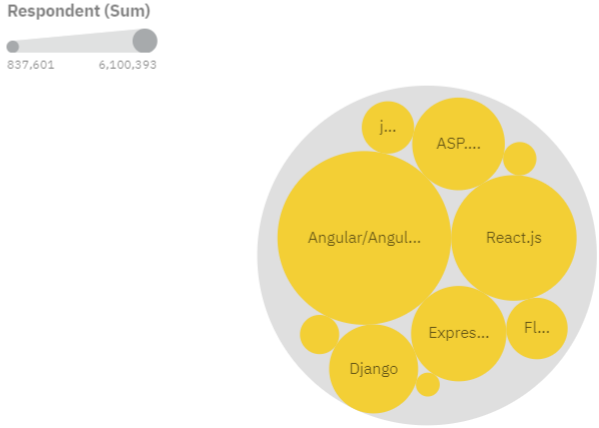
Top 10 DatabaseDesireNextYear



PlatformDesireNextYear



Top 10 WebFrameDesireNextYear



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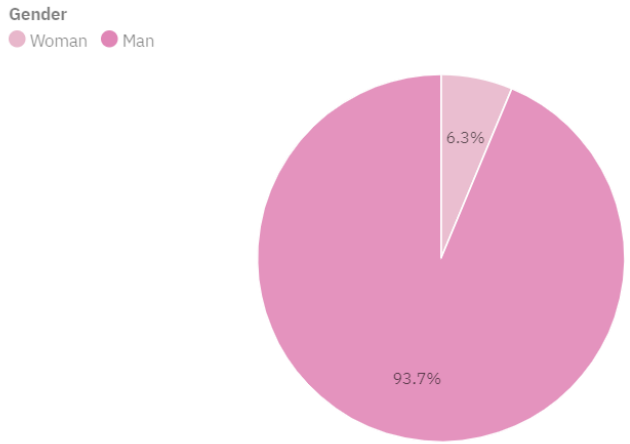
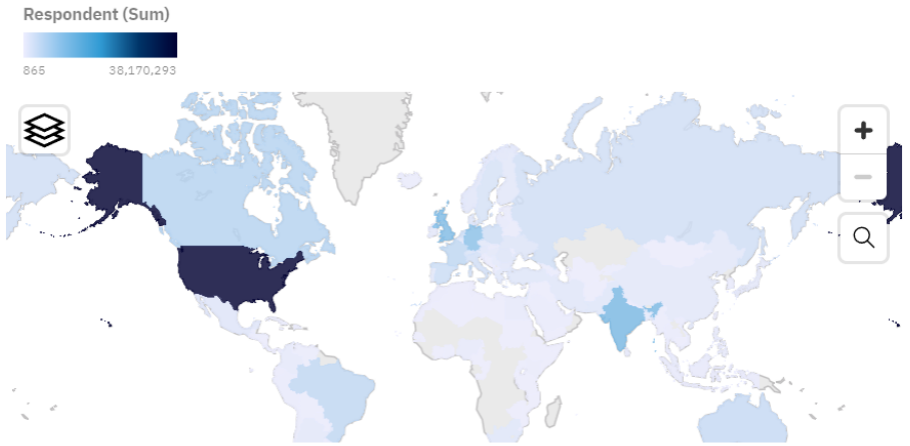
SKILLS NETWORK

DASHBOARD TAB 3

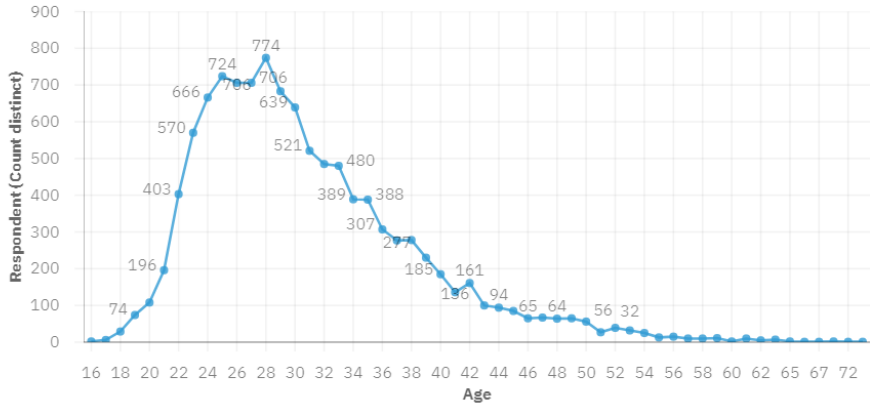
Respondent classified by Gender



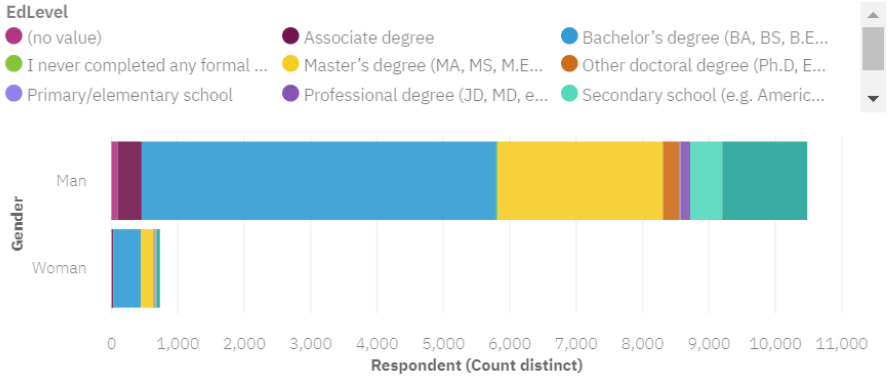
Respondent Count for Countries



Respondent Count by Age



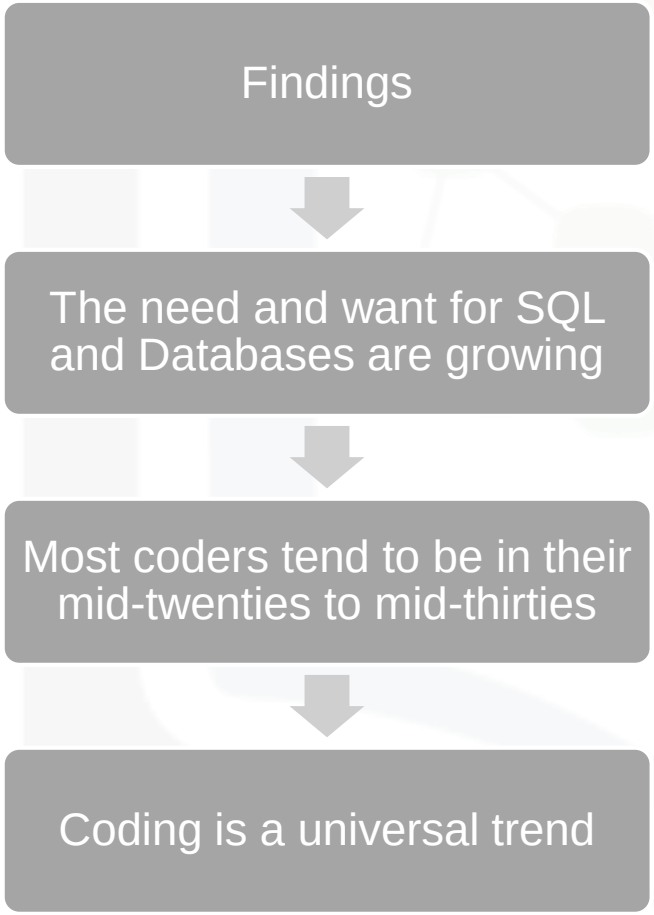
Respondent Count by Gender, classified by Formal Education Level



DISCUSSION

- Based on the data, what languages would you see gaining prominence?
- Which coding languages would you like to learn?
- How does age range affect coding prowess?

OVERALL FINDINGS & IMPLICATIONS



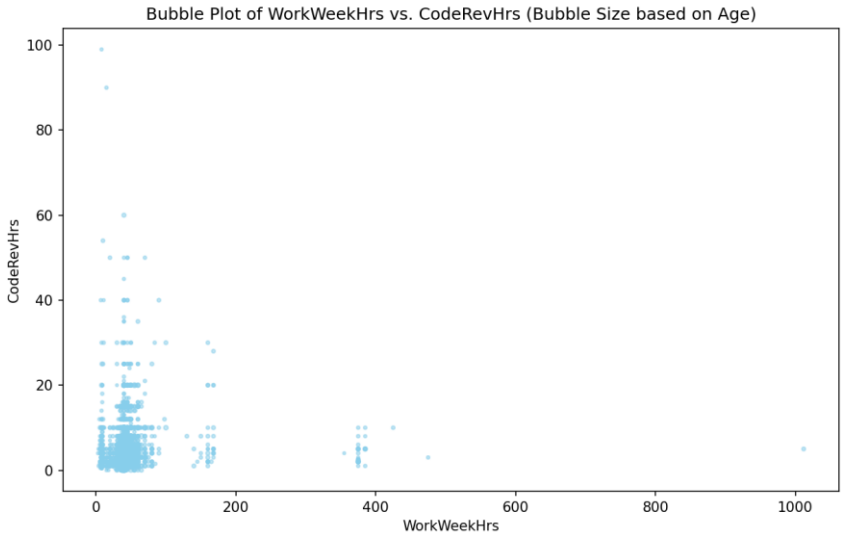
Implications

- The need for data analyst and scientists will continue to grow
- Coding will continue to be a younger practice as the new generation adapts to changing tech
- Any background can learn to code

CONCLUSION

- Data Analysts and Science opportunities will continue to grow
- Learning any coding language can help with your future
- While focused on the younger generation, any age group can learn to code
- The tech sphere will continue to grow

APPENDIX



- Include any relevant additional charts, or tables that you may have created duri

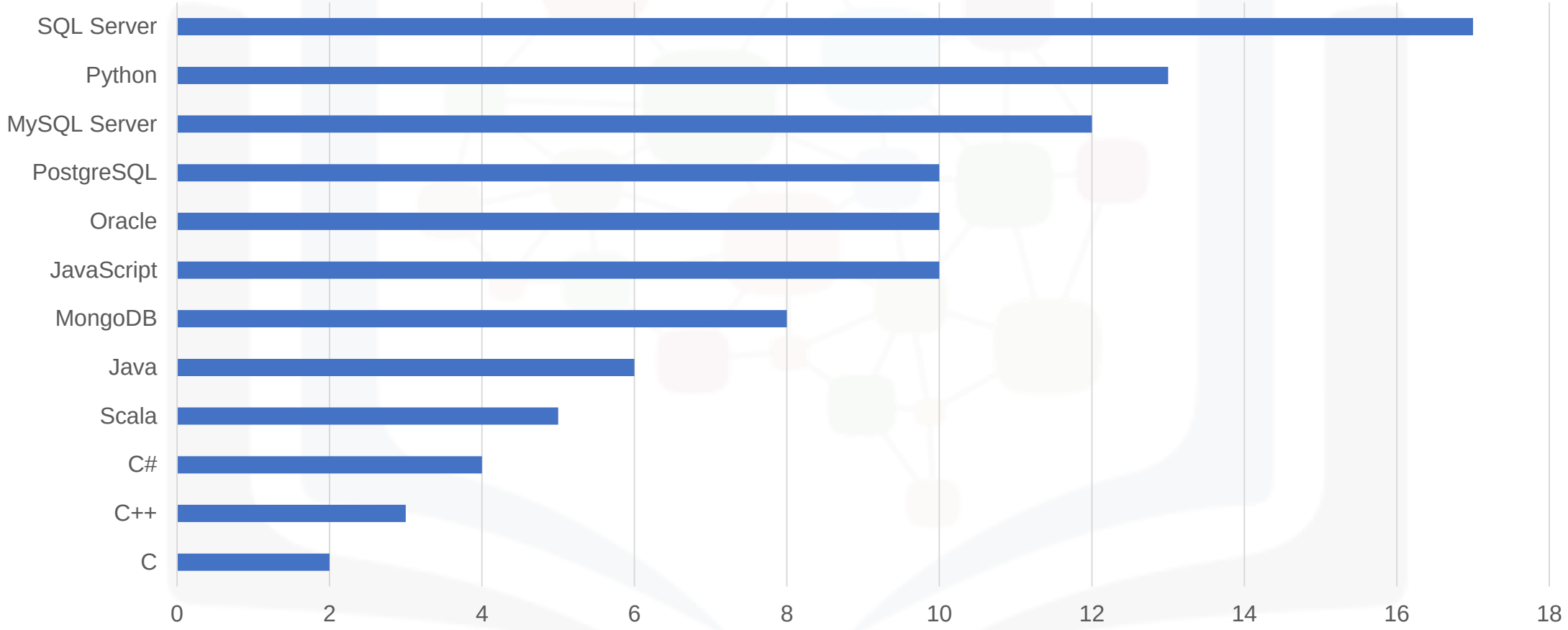
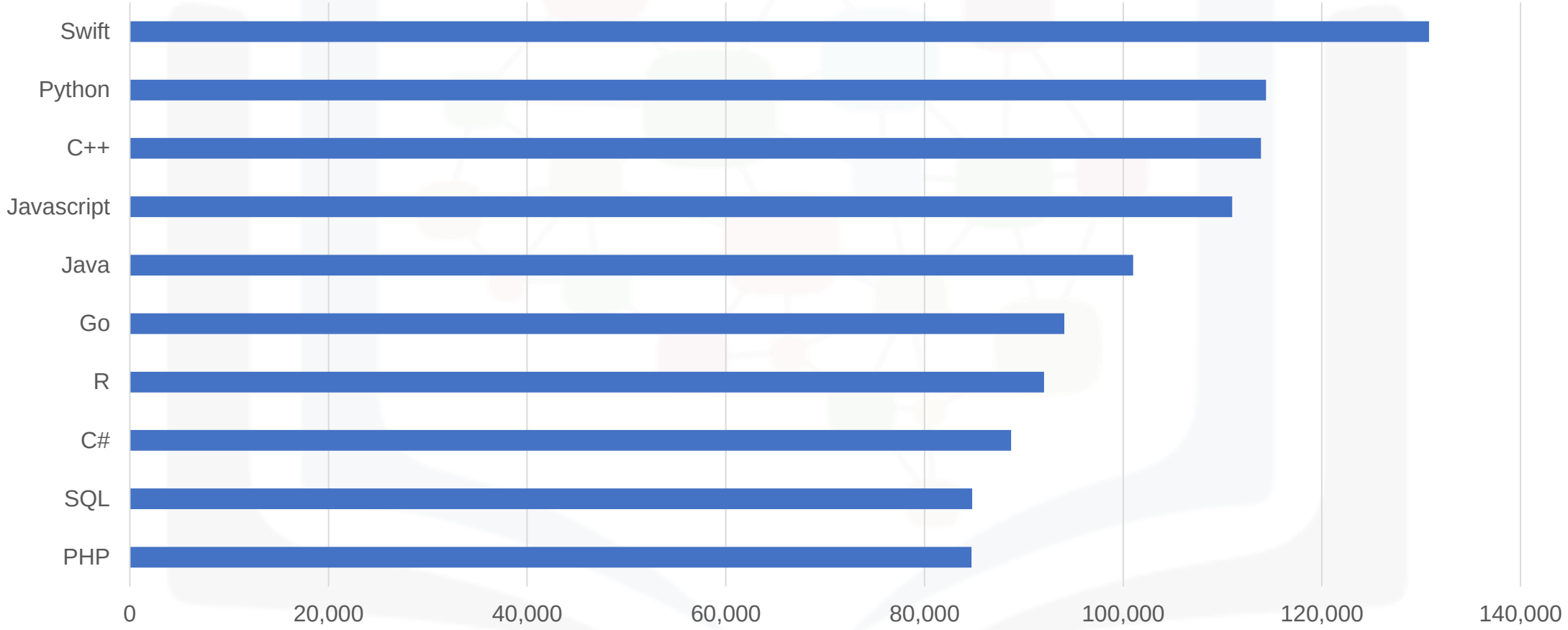
```python
# Filter out rows with missing 'Age' or 'WorkWeekHrs' values
df = df.dropna(subset=['Age', 'WorkWeekHrs'])

# Create a scatter plot
plt.figure(figsize=(10, 6))
plt.scatter(df['Age'], df['WorkWeekHrs'], color='skyblue', alpha=0.5)

# Set plot labels and title
plt.xlabel("Age")
plt.ylabel("WorkWeekHrs")
plt.title("Scatter Plot of Age vs. WorkWeekHrs")

# Show the plot
plt.show()
```

JOB POSTINGS



POPULAR LANGUAGES