



Stack Overflow Developer Survey - 2019

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OUTLINE



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EXECUTIVE SUMMARY



- The data was collected from stack overflow survey, which has around 90,000 responses.
- The findings showed that JavaScript, MySQL, Windows and jQuery are the most used technologies in 2019. It also showed that JavaScript will remain on top as the most desired programming language for the next year.
- This Presentation is going to present you how important is to keep updated in which technologies are in trend, so you won't be behind other people who are constantly updating themselves to not be outdated.
- The analysis showed that 93% of the respondents are men, it also showed that the majority of men and women in the tech field have a bachelor's degree, and are between 25 and 30 years old.

INTRODUCTION



- This presentation report has been created for stakeholders, IT professionals, HR managers, and anybody else with an interest in the IT field who wants to know which skills and technologies are in-demand and the future requirements.

METHODOLOGY



- Data collection
- Data Wrangling
 - Finding and removing duplicates.
 - Finding and imputing missing values.
 - Normalizing the data (reorganizing it to remove any unstructured data or redundant data to enable a superior, more logical means of storing that data).
- Exploratory Data Analysis
- Data Visualization
 - Usage of charts, such as Bar, Column, Line, Pie charts, Map, Heat map and Word Cloud.

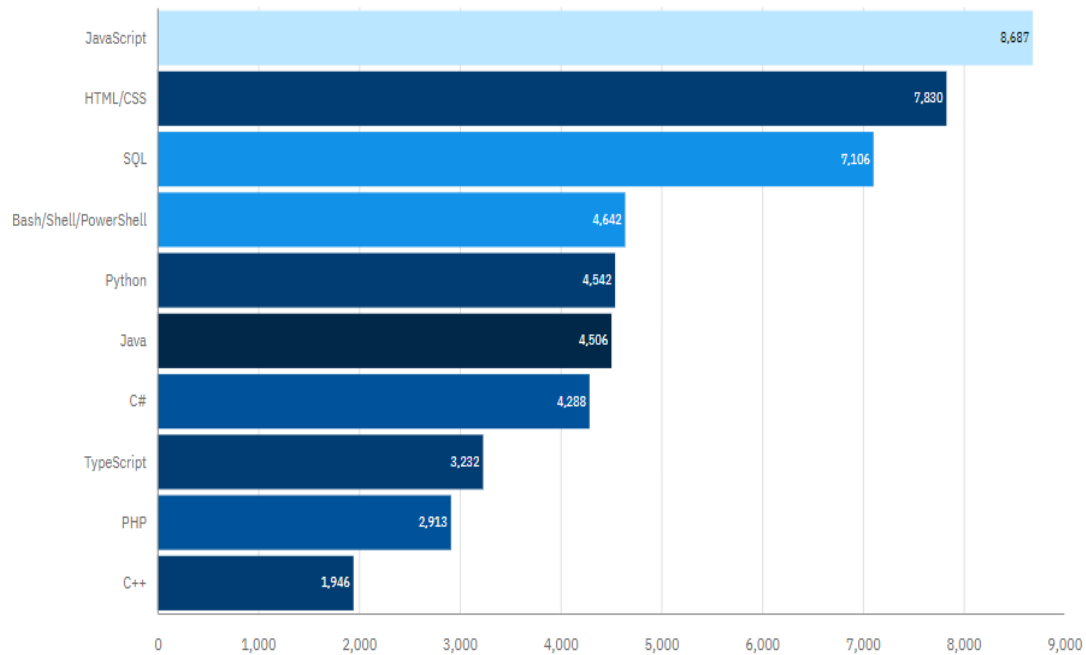
RESULTS



PROGRAMMING LANGUAGE TRENDS

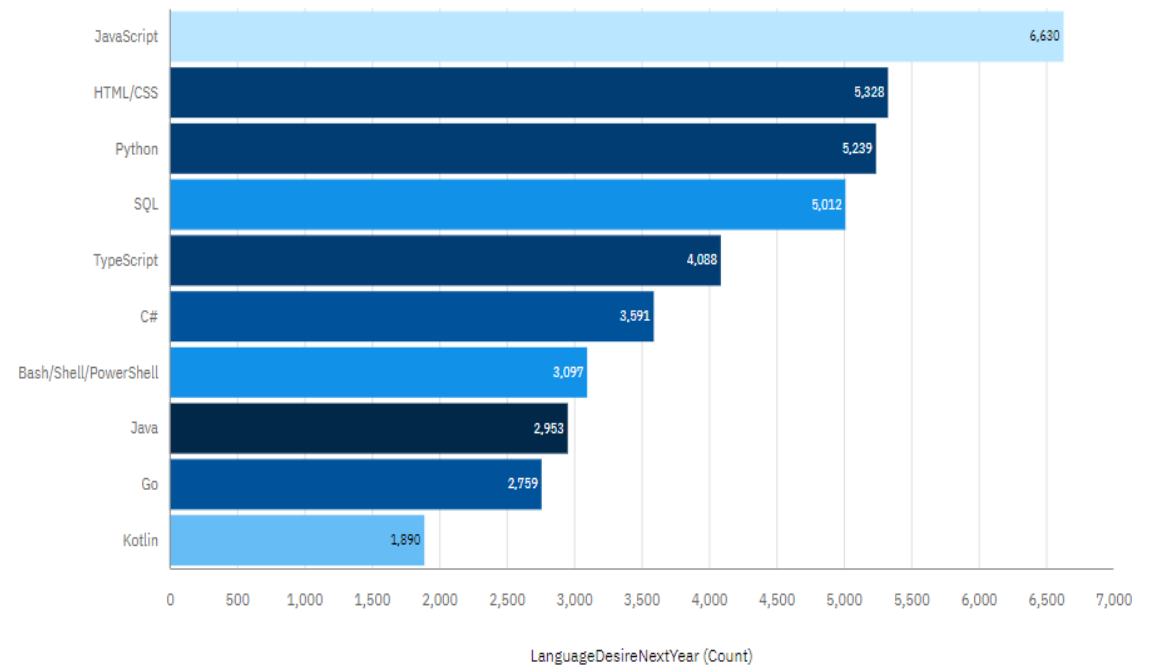
Current Year

Top 10 LanguageWorkedWith



Next Year

Top 10 LanguageDesireNextYear



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

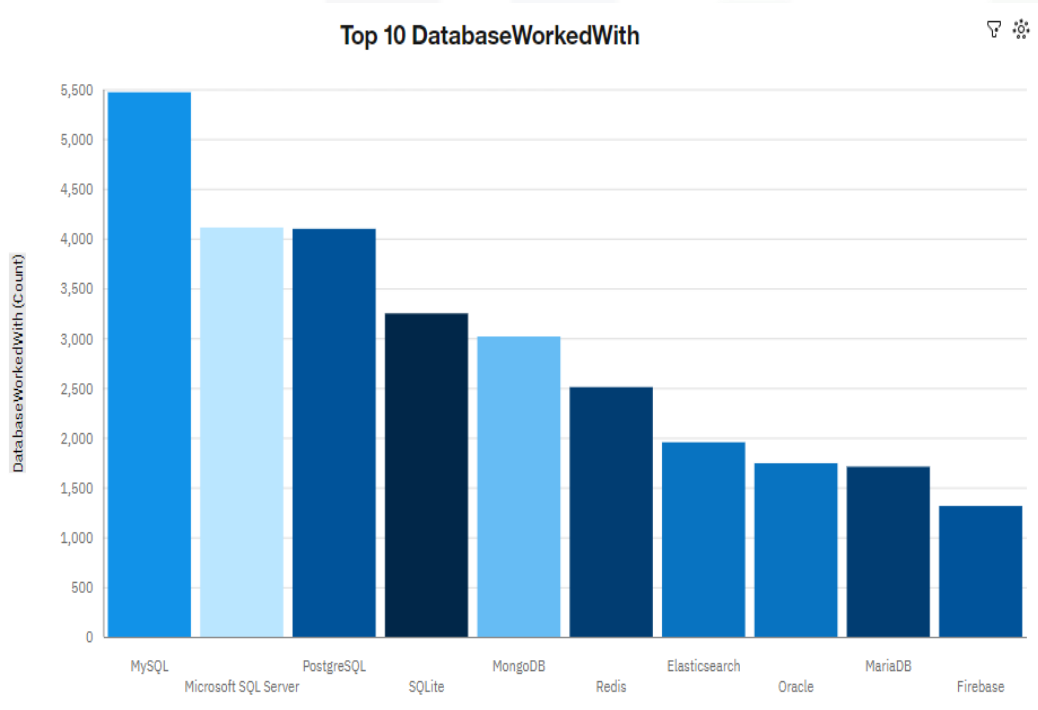
- Python will have more demand than SQL next year.
- JavaScript, HTML/CSS, Python and SQL will remain as the most used languages next year.
- The usage of Bash/Shell/PowerShell will decrease next year.

Implications

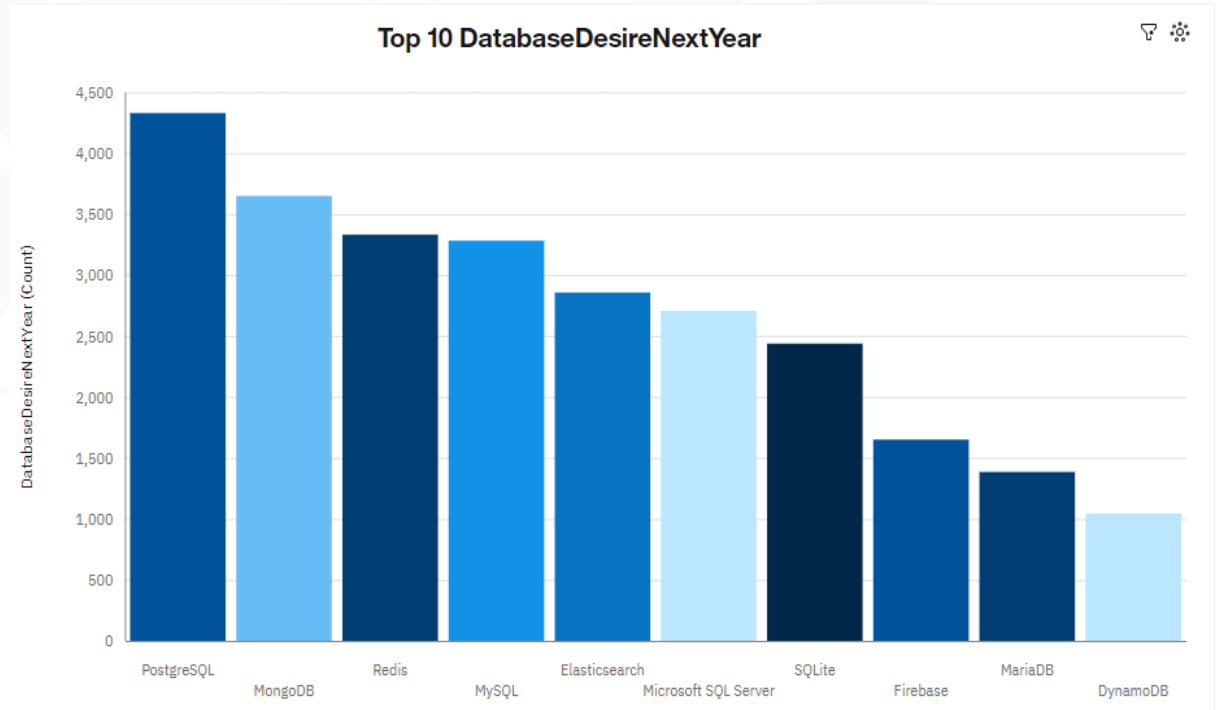
- SQL and Python are the most important languages for data professionals, as the amount of data increases over the year, the need of use SQL and Python consequently will increase or remain on the top.
- JavaScript and HTML/CSS are the most used languages for web development, which means that web development has the highest demand in the tech field.

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- NoSQL databases, such as Redis, MongoDB and Elasticsearch are project to become popular in the next year
- MySQL and PostgreSQL will remain on top in the next year

Implications

- Open source databases are the most used and preferred by the companies
- Oracle is losing relevance in the next year

DASHBOARD

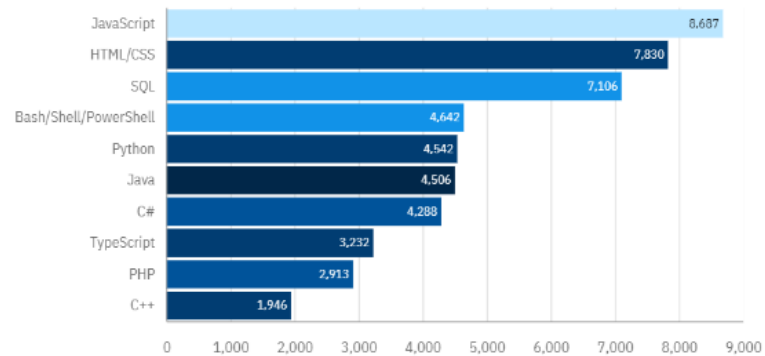


<https://github.com/MelissaAntunes/IBM-data-analyst-professional/blob/main/IBM%20Data%20Analyst%20Capstone%20Project/DashboardAssignment.pdf>

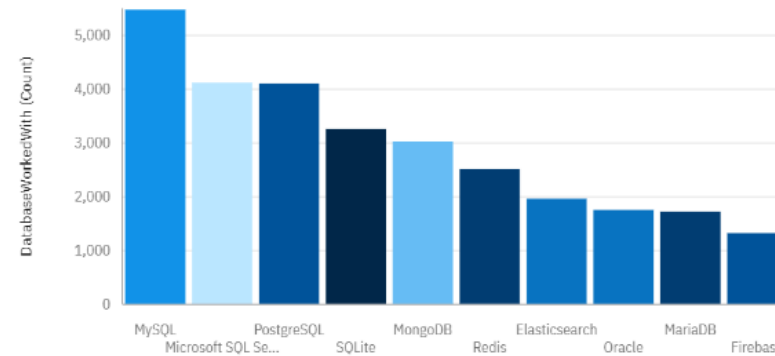
DASHBOARD TAB 1

Current Technology Usage

Top 10 LanguageWorkedWith



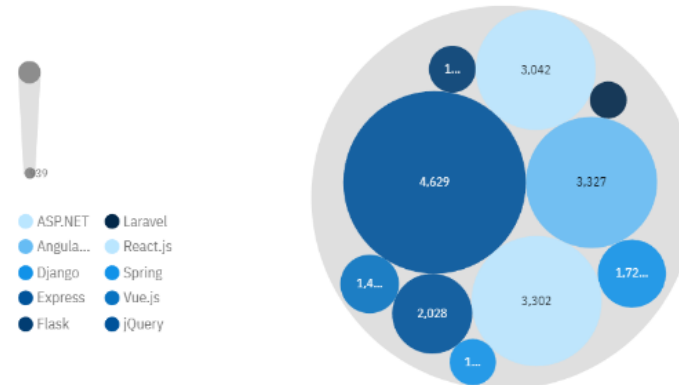
Top 10 DatabaseWorkedWith



PlatformWorkedWith



Top 10 WebFrameWorkedWith



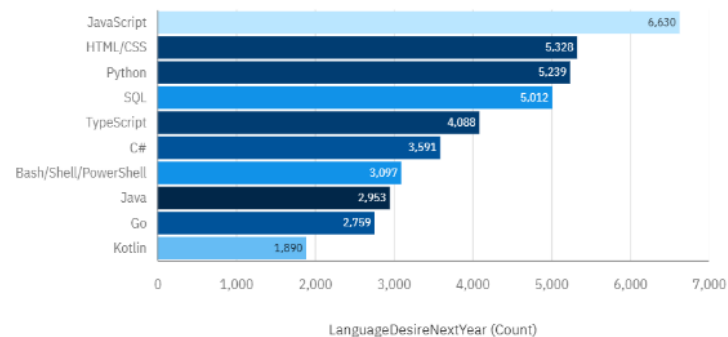
DASHBOARD TAB 2

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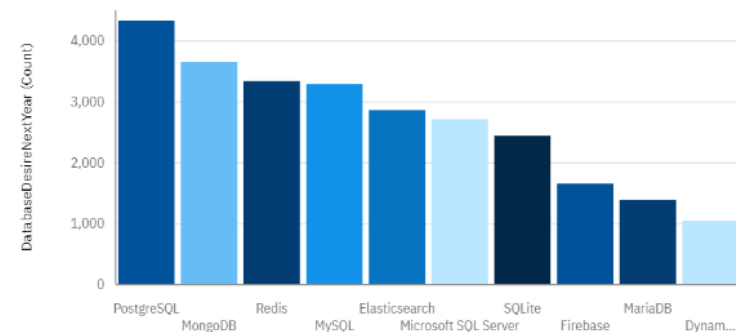
New dashboard

Future Technology Trend

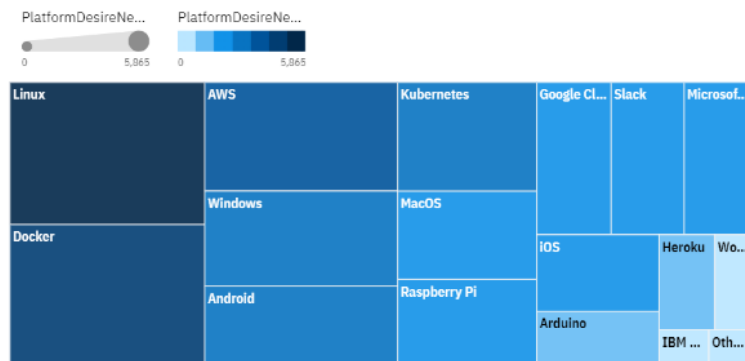
Top 10 LanguageDesireNextYear



Top 10 DatabaseDesireNextYear



PlatformDesireNextYear



Top 10 WebFrameDesireNextYear



DASHBOARD TAB 3

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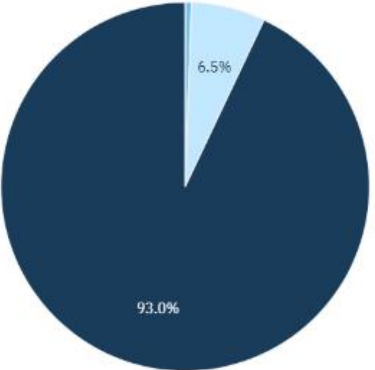
New dashboard

Demographics

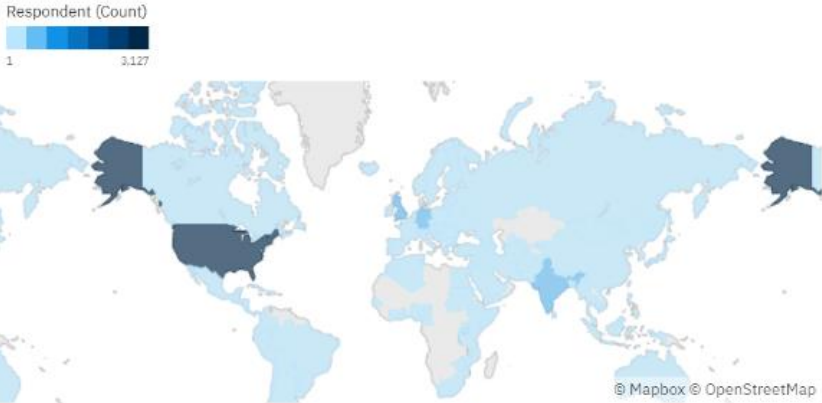
Respondent classified by Gender

Gender

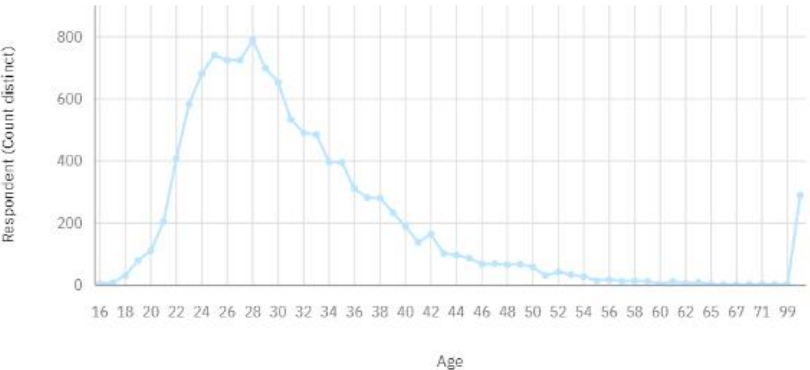
- Non-binary, g...
- Woman
- Man



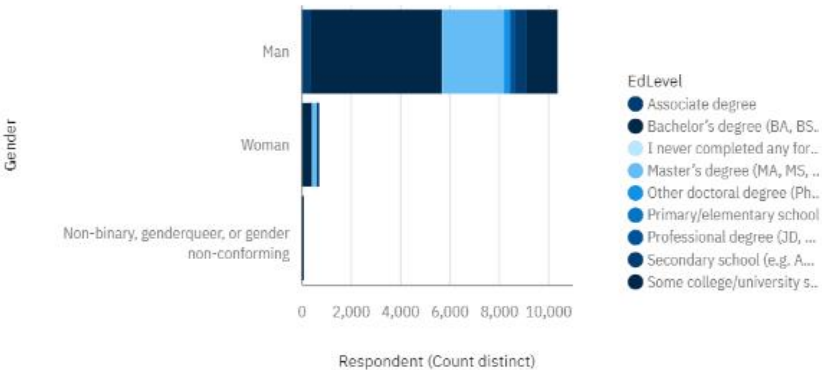
Respondent Count for Countries



Respondent Count by Age



Respondent by Gender colored by EdLevel



DISCUSSION



- The following questions were analyzed using the data:
 - Which programming languages are most in use, and which are desired for the future?
 - What is the highest age group between the respondents?
 - Do the majority of the respondents have a bachelor's degree?

OVERALL FINDINGS & IMPLICATIONS

Findings

- The majority of the tech field are over 24 and under 40 years old.
- Most of the respondents want to use the platform Linux and the web frame React,js.
- Most of the respondents are from USA.

Implications

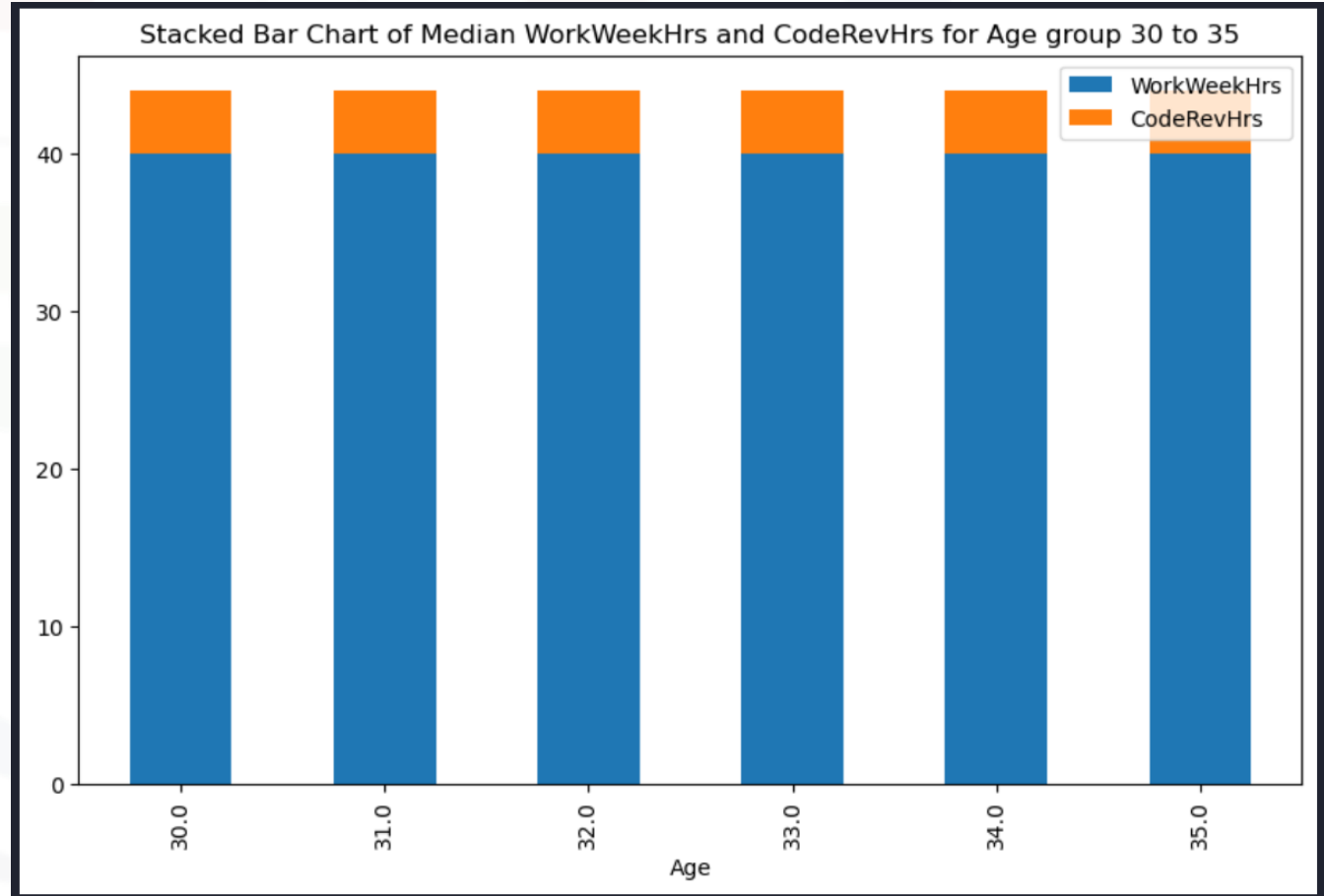
- Data professionals will need to learn NoSQL databases, as their usage will increase next year.
- Less developed countries need more investments in tech education.

CONCLUSION

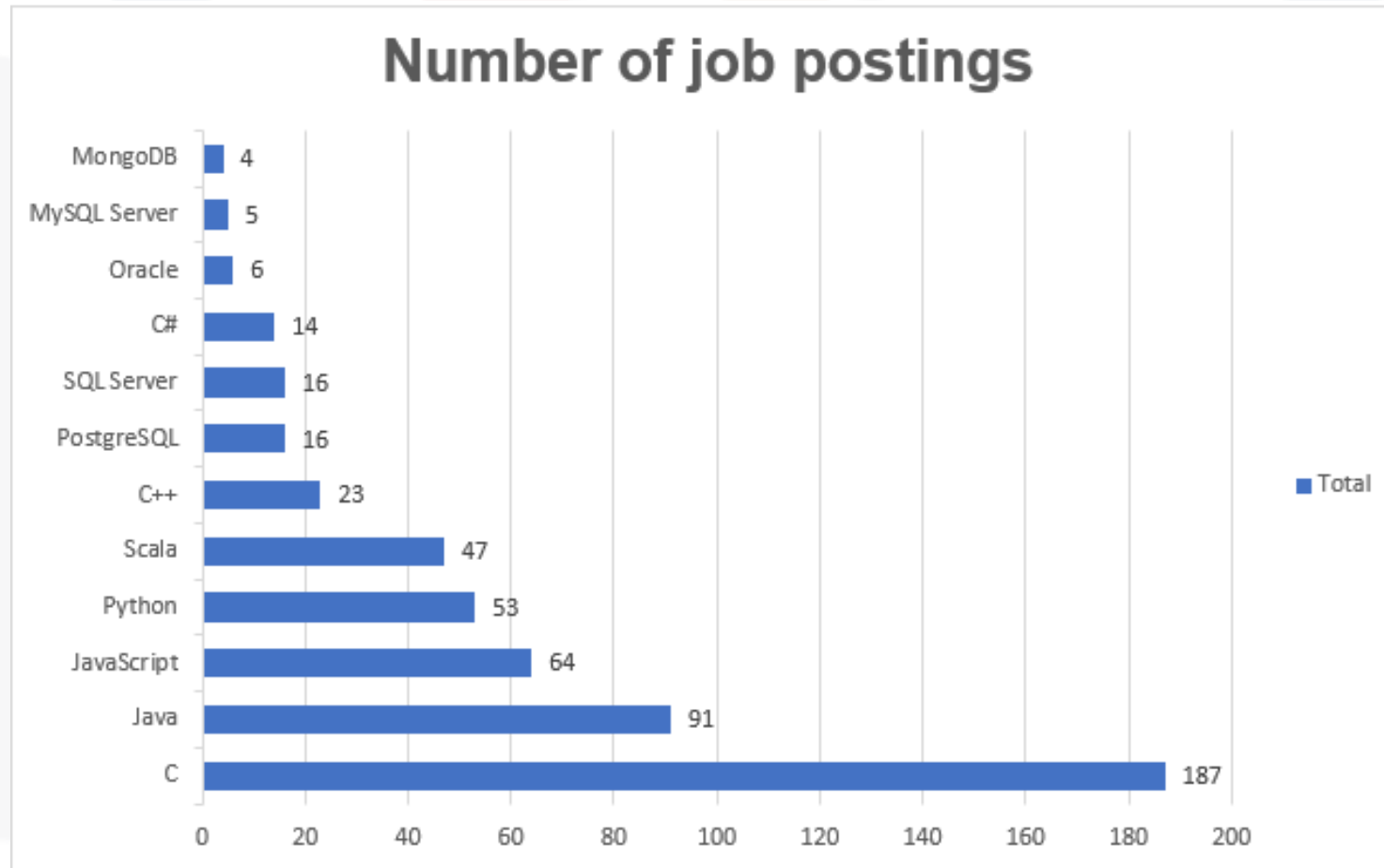


- It is important to stay updated in tech field as the trends keep changing over time.

APPENDIX



JOB POSTINGS



POPULAR LANGUAGES

