



ANALYSIS ON TRENDING IT SKILLS

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EXECUTIVE SUMMARY



- Relevant skills required in the IT field and business consulting are ever changing and evolving.
- This presentation will show the current and future trends in Programming languages, Databases, Platforms and WebFrames.
- It is important to identify the future skill requirements to keep ourselves updated and remain competitive.
- Overall the aim is to identify future skill requirements and trends to help make well informed data-driven hiring and budgetary decisions.

INTRODUCTION



- This presentation is created for stakeholders and business decision makers within the global IT and Business consulting service firm.
- The presentation will help identify answers to questions like:
 - What are top Programming skills in demand?
 - What are top Database skills in demand?
 - What are the popular IDEs?
- Recommendations will be stated based on the findings of this report.

METHODOLOGY

- The dataset used in this project comes from Kaggle under the Public Domain License. Using a modified subset the data was wrangled in order to remove duplicates, impute missing values and normalize data.
- Next, the data underwent exploratory analysis in order to find the distribution, presence of outliers, and determine correlation between columns in the dataset.
- The data was then visualized to explore the relationship between two features and the composition and comparison of data.
- Finally, IBM Cognos Analytics was used to create dashboards



RESULTS

1. Desired Programming Language
2. Top Database worked with
3. Top WebFrame worked with
4. Top Platform worked with

CURRENT YEAR

JavaScript

MySQL

JQuery

Linux

NEXT YEAR

JavaScript

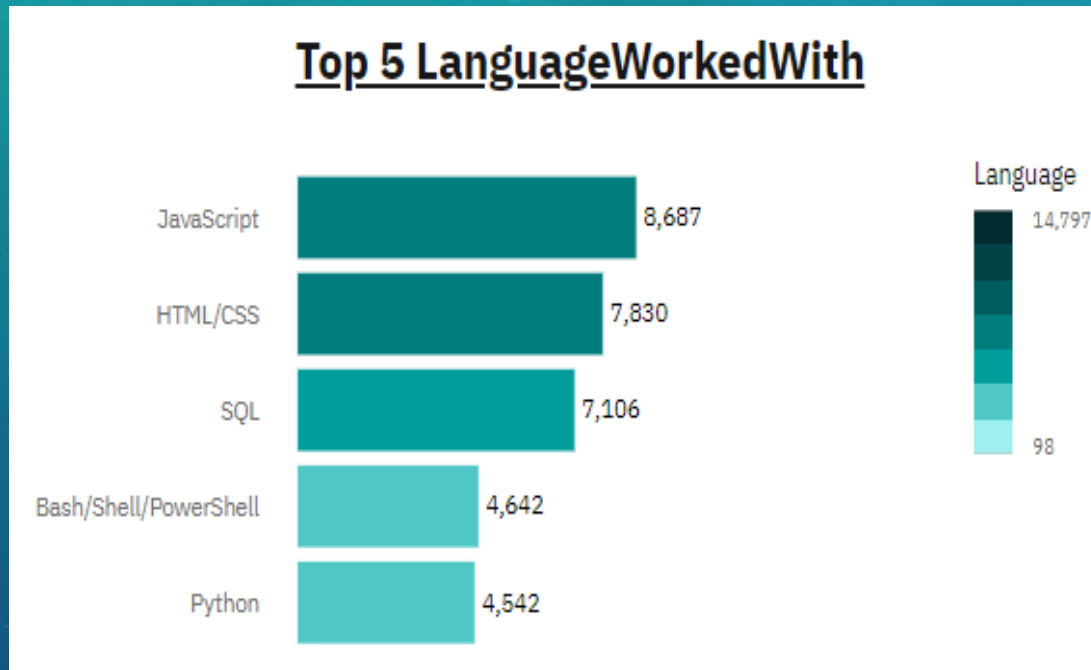
PostgreSQL

React.js

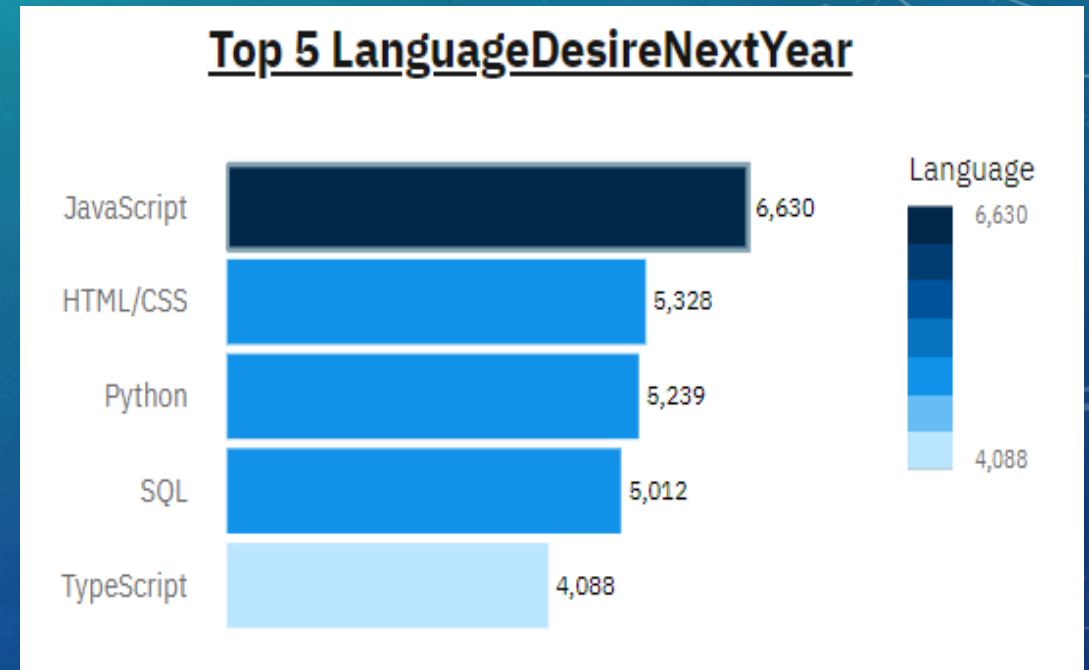
Linux

PROGRAMMING LANGUAGE TRENDS

CURRENT YEAR



NEXT YEAR



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

FINDINGS

- JavaScript and HTML/CSS continue to be the popular programming languages for this year and next.
- Python and TypeScript have gained interest in the next year
- Whereas SQL and Bash/Shell have stepped down

Continue to employ people skilled in JavaScript and HTML/CSS



Employ people with Python and TypeScript skills

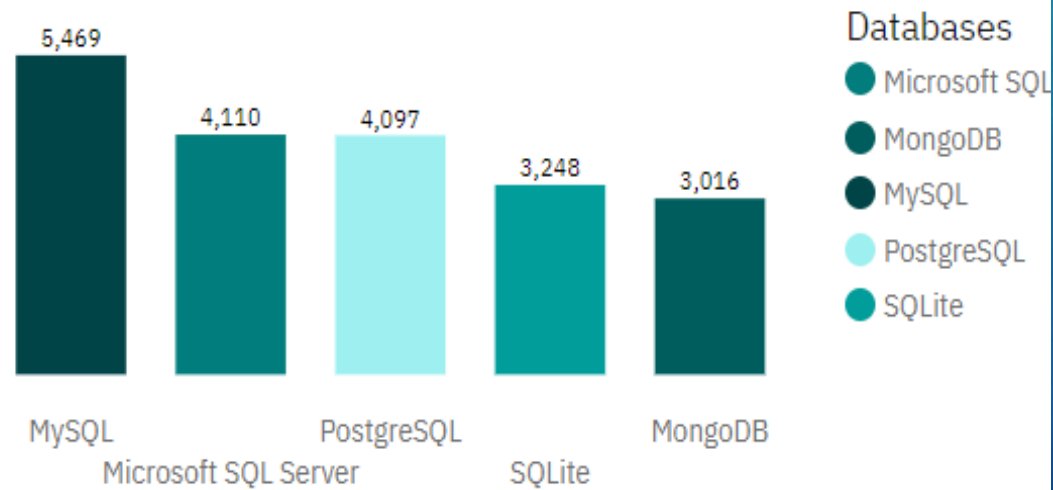


Employ less people with SQL and Bash/Shell

DATABASE TRENDS

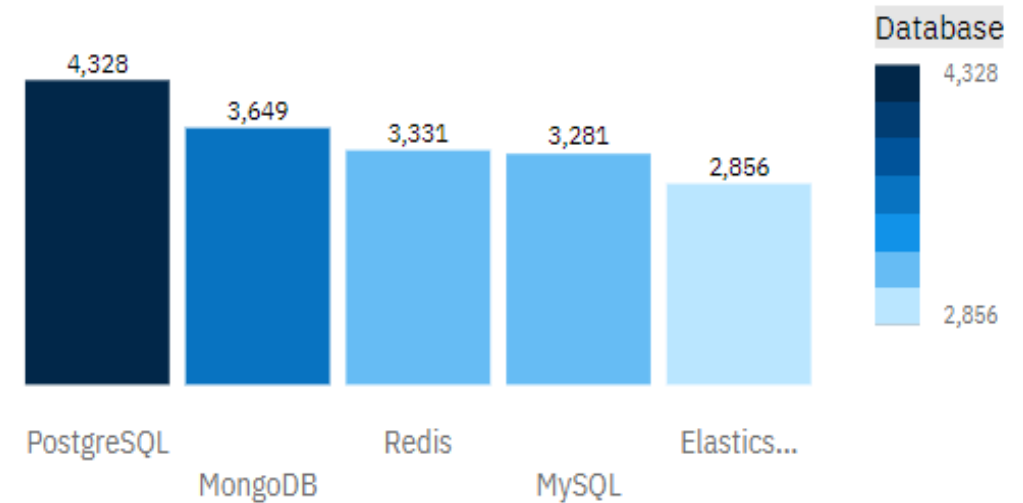
CURRENT YEAR

Top 5 Database Worked With



NEXT YEAR

Top 5 Database Desire Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

FINDINGS

- Interest in MySQL, MS SQL server and SQLite has decreased for next year
- Usage of PostgreSQL and MongoDB will seemingly increase compared to current year
- Whereas Redis and Elasticsearch has gained interest for next year

Employ less people with
MySQL, MS SQL server,
SQLite



Employ people with
knowledge in PostgreSQL
and MongoDB



Give employees training
in new Databases like
Elasticsearch and Redis

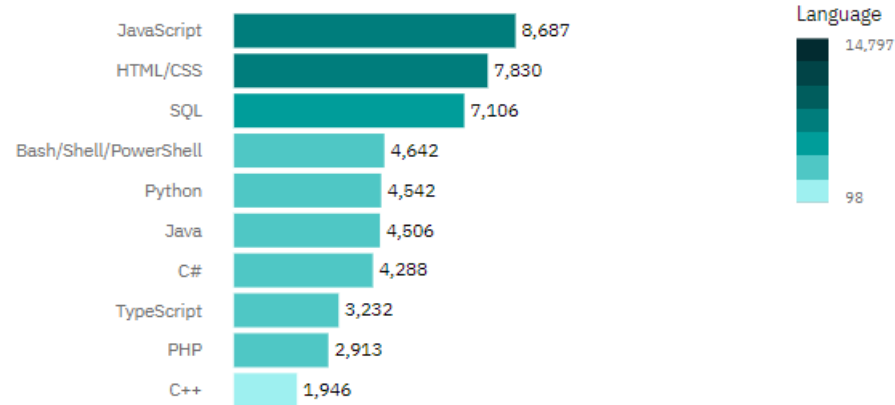
DASHBOARD



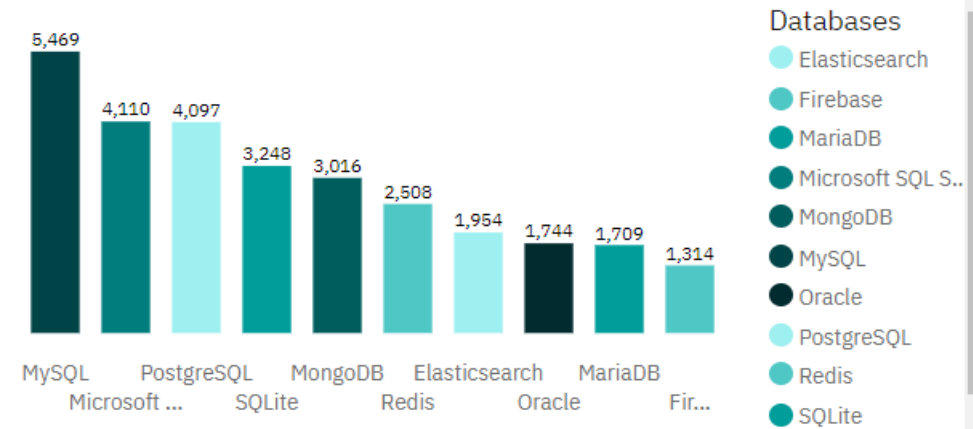
Please click to see [dashboard](#)

DASHBOARD TAB 1 – CURRENT TECHNOLOGY USAGE

Top 10 LanguageWorkedWith



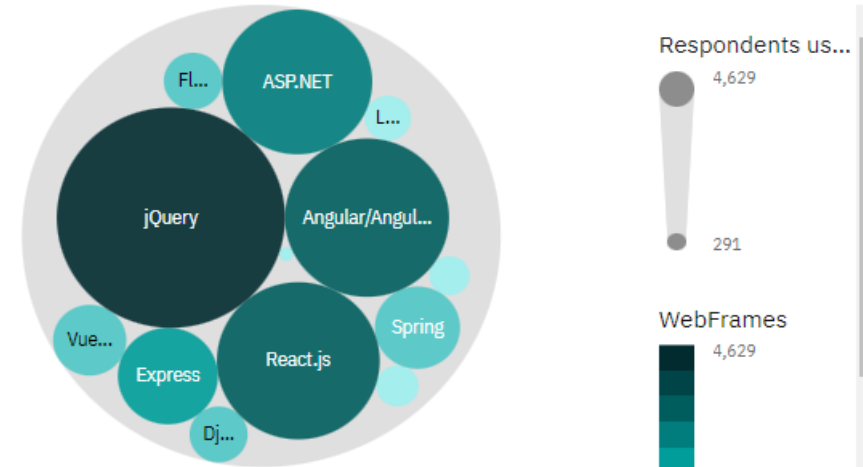
Top 10 DatabaseWorkedWith



PlatformWorkedWith

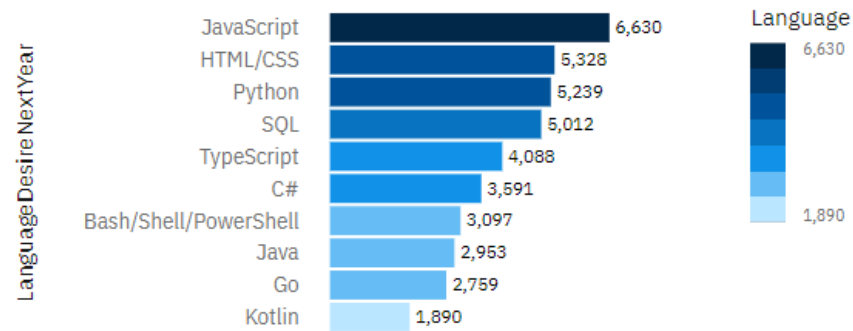


Top 10 WebFramesWorkedWith



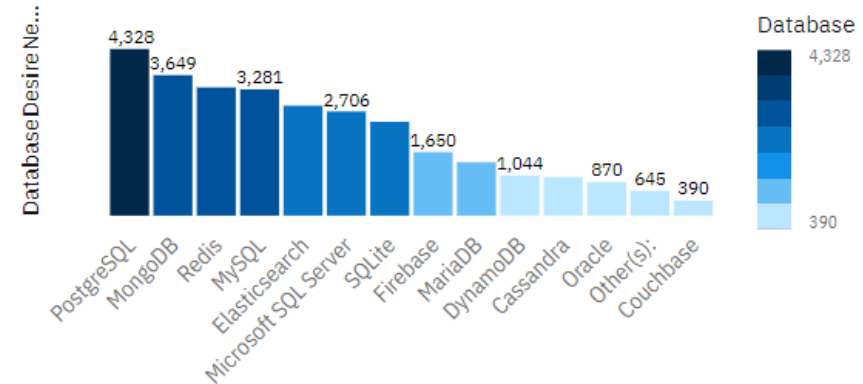
DASHBOARD TAB 2 – FUTURE TECHNOLOGY TREND

Top 10 LanguageDesireNextYear



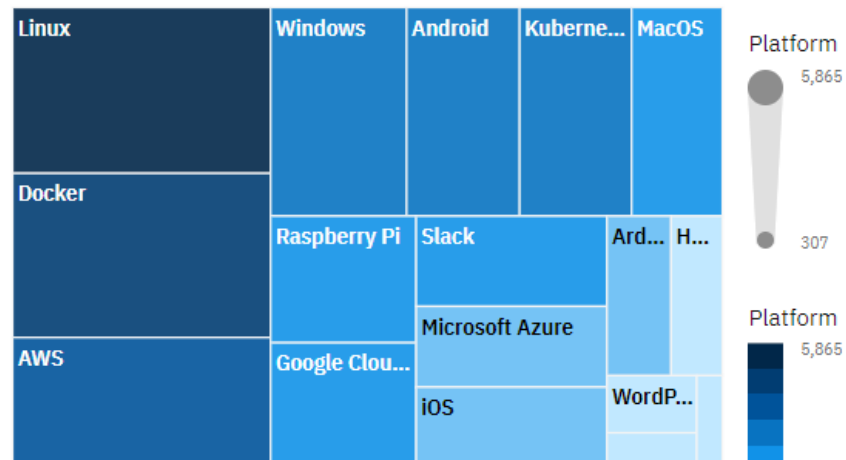
LanguageDesireNextYear (Count)

Top 10 DatabaseDesireNextYear



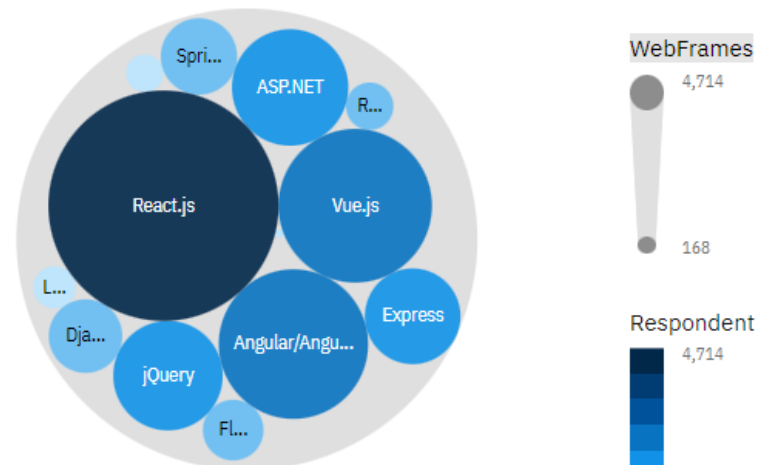
DatabaseDesireNextYear

PlatformDesireNextYear



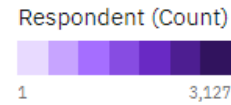
Platform

Top 10 WebFrameDesireNextYear



WebFrames

The image is a composite graphic. On the left, there's a world map with regions colored in shades of purple, blue, and green. Above the map are two circular gauges: the top one has a needle pointing towards the 180-degree mark, and the bottom one has a needle pointing towards the 0-degree mark. Below the map is a list of education levels, each with a colored circle next to it. The background is a dark blue gradient with faint circular patterns and a compass rose.

Gender (Count)

DISCUSSION



- Human resources hiring employees and people looking for possible job prospects should be well informed about the trends in the IT sector for both personal development and welfare of the company

OVERALL FINDINGS & IMPLICATIONS

FINDINGS

- PROGRAMMING LANGUAGES: TypeScript is gaining popularity and Python continues to increase in demand
- DATABASES: Redis, Elasticsearch, PostgreSQL, MongoDB are essential in the future
- PLATFORMS: Interest in Slack and windows is dropping significantly
- WebFrames: Vue.js, Rreact.js are gaining growth

Continue to staff JavaScript, TypeScript and HTML/CSS skilled people



Employ more people skilled in Redis and MongoDB



Continue to staff People with React.js and Vue.js skills



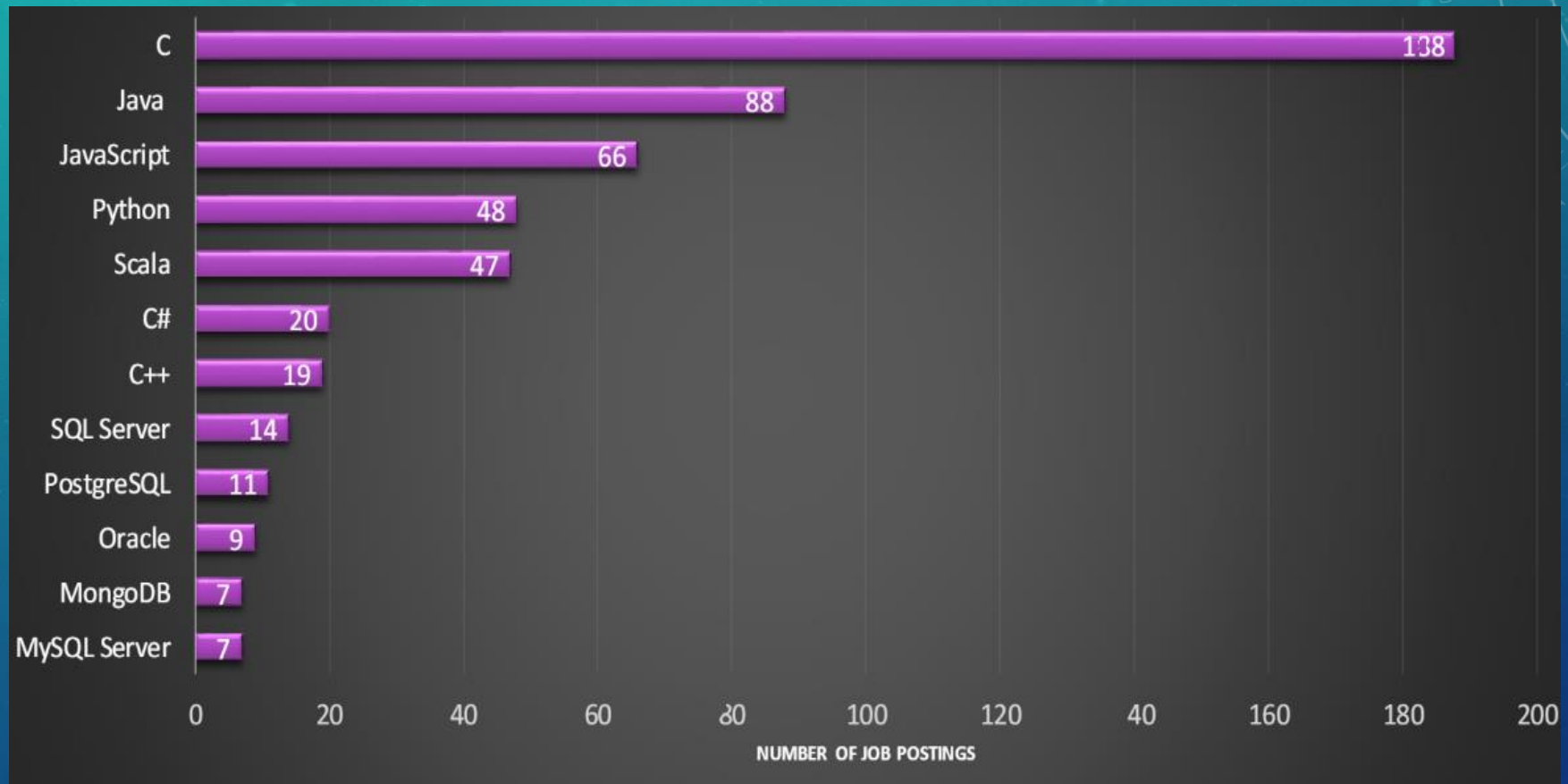
Staff people with Android, Linux, AWS skills

CONCLUSION



1. Carve out a budget in order to fill in additional employees with required skills to fill up gaps at work.
2. Set aside extra budget to upskill already employed staffs with the relevant skills to keep up pace at the work environment
3. Make adjustments accordingly for the non-demand skills

GITHUB JOB POSTINGS



POPULAR LANGUAGES

