



# Current & Future Technology trends with Demographical Analysis

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# OUTLINE

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- Executive Summary
- Introduction
- Methodology
- Results
  - Visualization – Charts
  - Dashboard
- Discussion
  - Findings & Implications
- Conclusion
- Appendix

# EXECUTIVE SUMMARY

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- Current Technology Analysis
- Future Trending Technology Analysis
  - Top Trending Languages Usage Level
  - Top Trending Data Base Usage Level
  - Top FrameWork Working
- Demo Graphic data Analysis
- Representation of Graphs and Charts
- Dashboard Analysis of all Insights

# INTRODUCTION

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- About:
- The Presentation about the analysis of current and future trending's technologies.
- Purpose:
- To analyze Top trending of languages and database
- Analysing with user demographical data differentiated with age ,gender and country level analyze.
- What all the Framework is trending present and future.
- Which language technologies are people using most ,and interesting in future analysis.
- Audience: HR department

# METHODOLOGY

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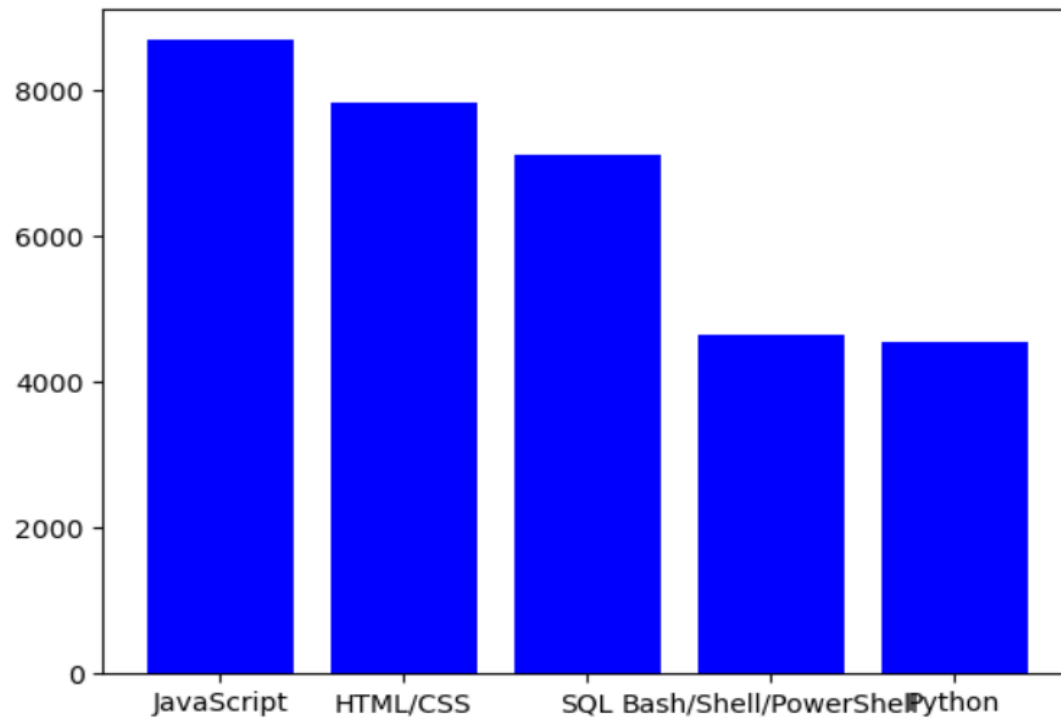
- Used panda library for import data set ,matplotlib for visualization
- Worked with data handling and data imputation.
- Used Trendingtechnologies,Trendingdatabase and Demographical data
- IBM cogon's analytics for creating and analyzing data in dashboard.
- SQLite for connecting data base with python,and analyzed the trends.

# RESULTS

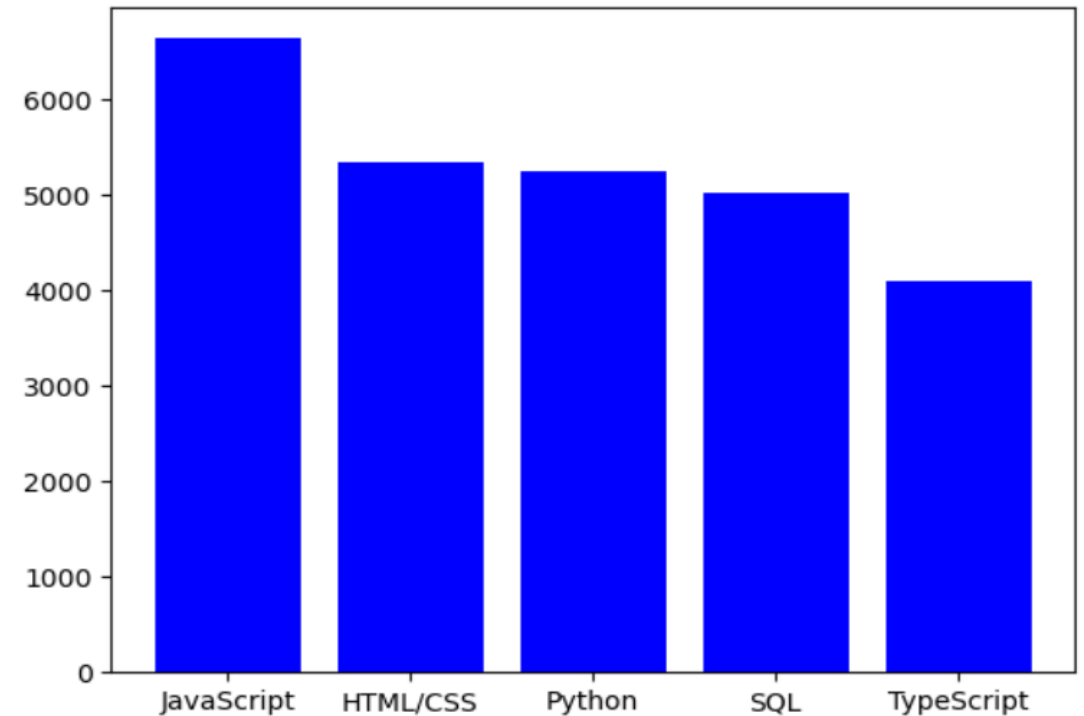
	Respondent	LanguageWorkedWith	LanguageDesireNextYear	DatabaseWorkedWith	DatabaseDesireNextYear	PlatformWorkedWith	PlatformDesireNextYear
0	4.0	C	C	MySQL	MySQL	Linux	Linux
1	4.0	C++	C#	SQLite	SQLite	Windows	Windows
2	4.0	C#	JavaScript	NaN	NaN	NaN	NaN
3	4.0	Python	SQL	NaN	NaN	NaN	NaN
4	4.0	SQL	NaN	NaN	NaN	NaN	NaN
5	9.0	Bash/Shell/PowerShell	Bash/Shell/PowerShell	DynamoDB	PostgreSQL	AWS	AWS
6	9.0	C#	C	PostgreSQL	Redis	Docker	Docker
7	9.0	HTML/CSS	HTML/CSS	SQLite	SQLite	Heroku	Heroku
8	9.0	JavaScript	JavaScript	NaN	NaN	Linux	Linux
9	9.0	Python	Ruby	NaN	NaN	MacOS	MacOS

# PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- From the graph we can observe that the mostly using languages are javascript and html .
- And the python and power shell looks same usage level .

## Implications

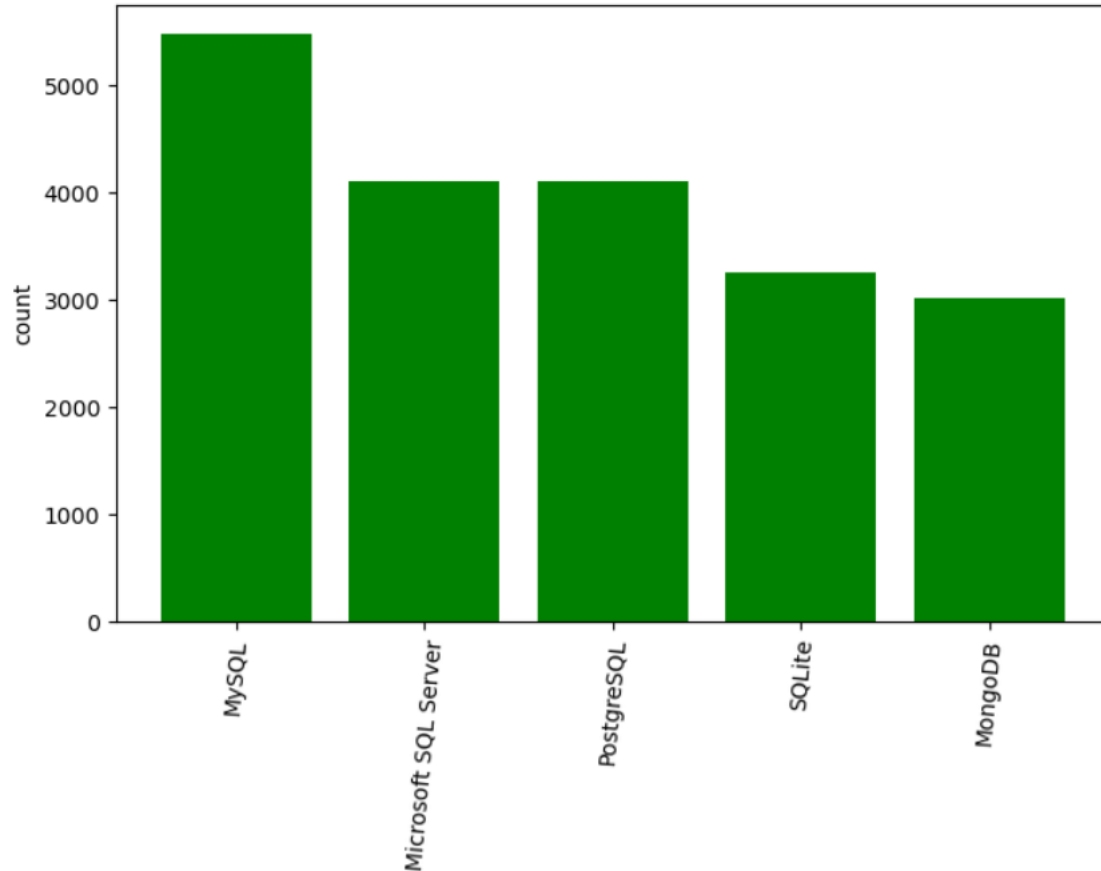
- From the future analysis still the javascript and html having same usage and trend .
- The python language usage was increasing and now it become demanding language .



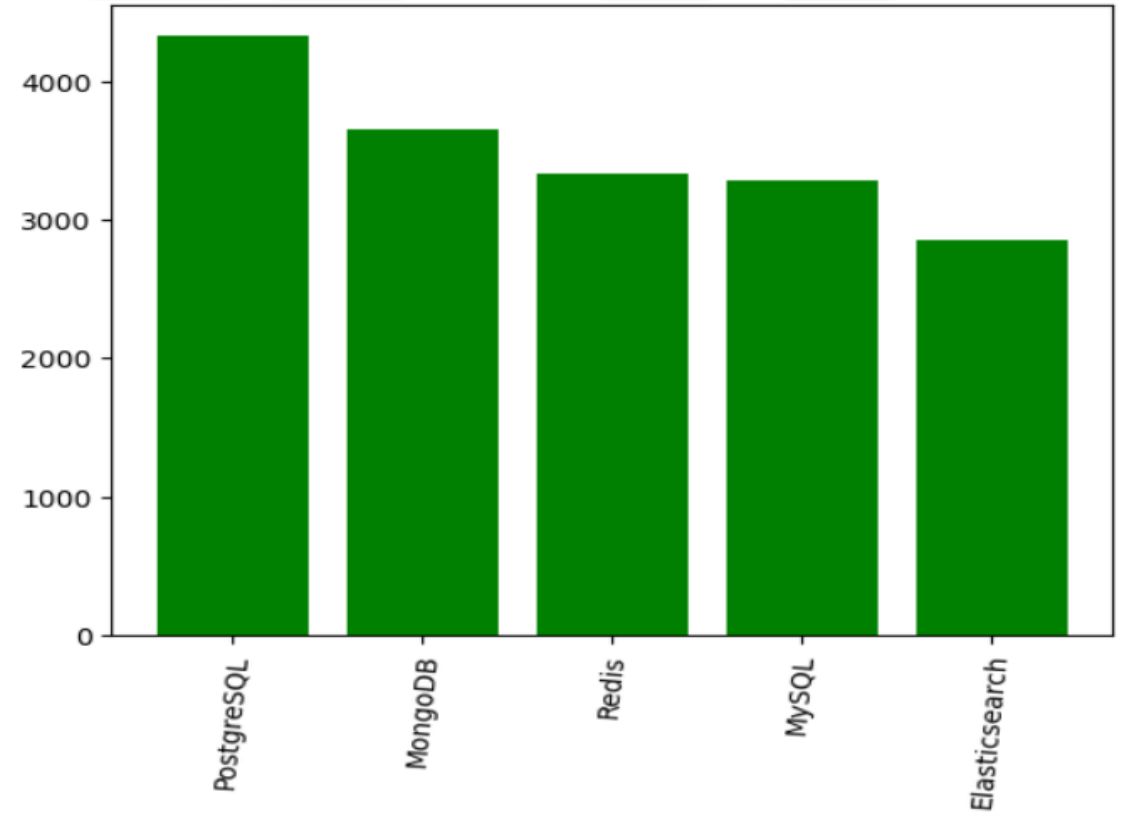
# DATABASE TRENDS

## Current Year

Top Database present

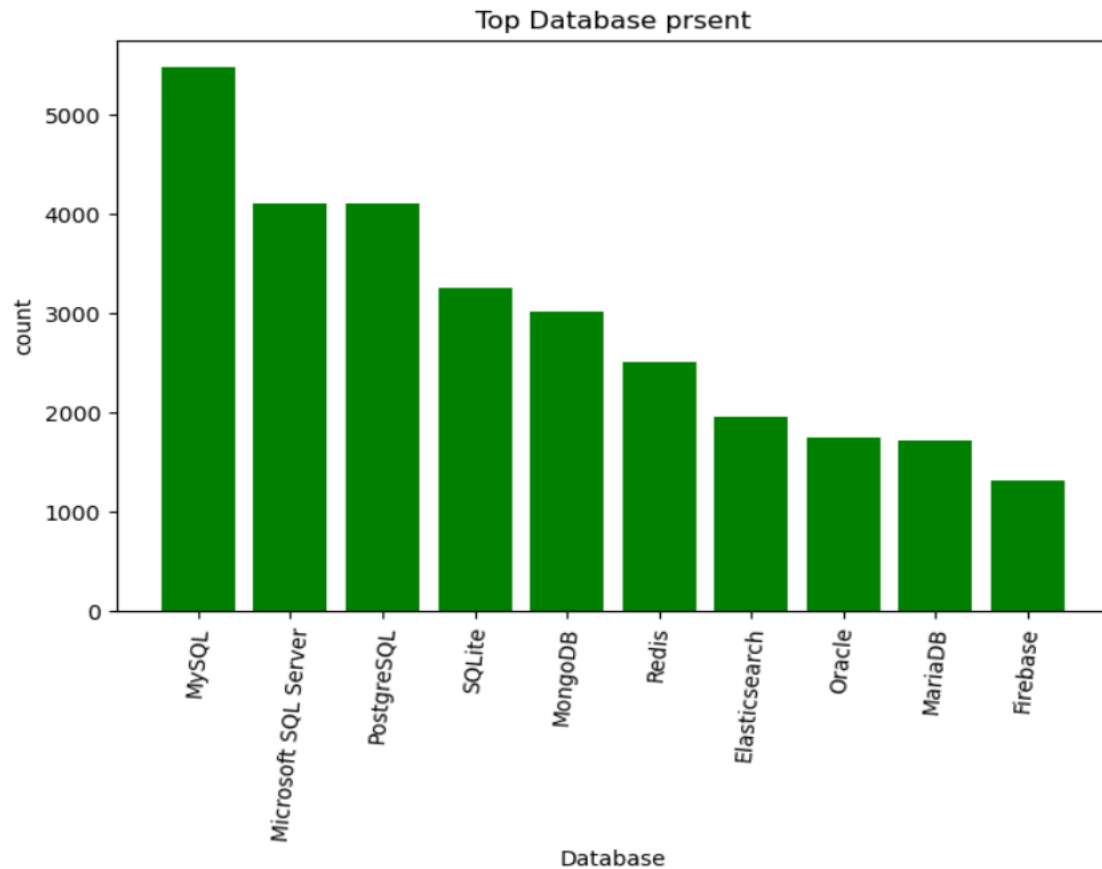


## Next Year

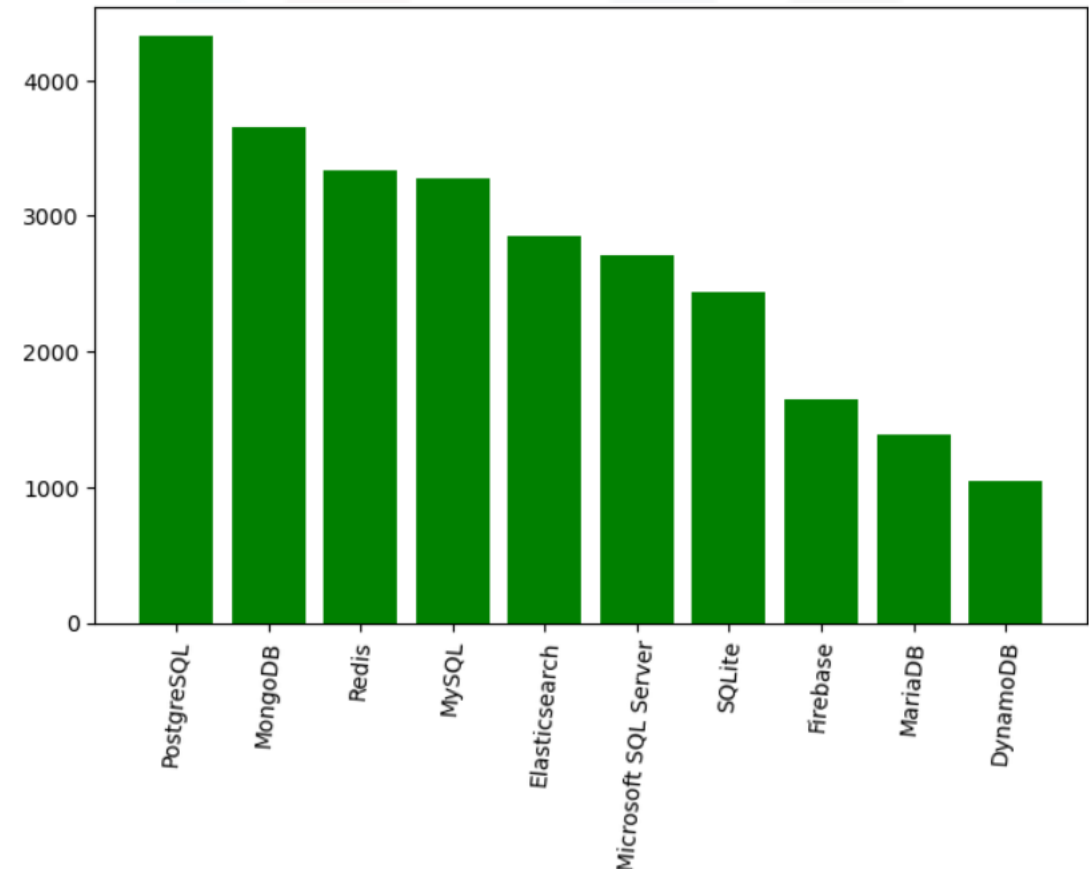


# DATABASE TRENDS

## Current Year



## Next Year



# DATABASE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- Current trending data base is a my sql and Microsoft sql server
- Oracle and Mongodb having less usage count compare to sql.

## Implications

- For future trending database we can observe from the graph the postgresql and mongodb in trending count compare to others.
- It seems the non relational data base usage was increased.

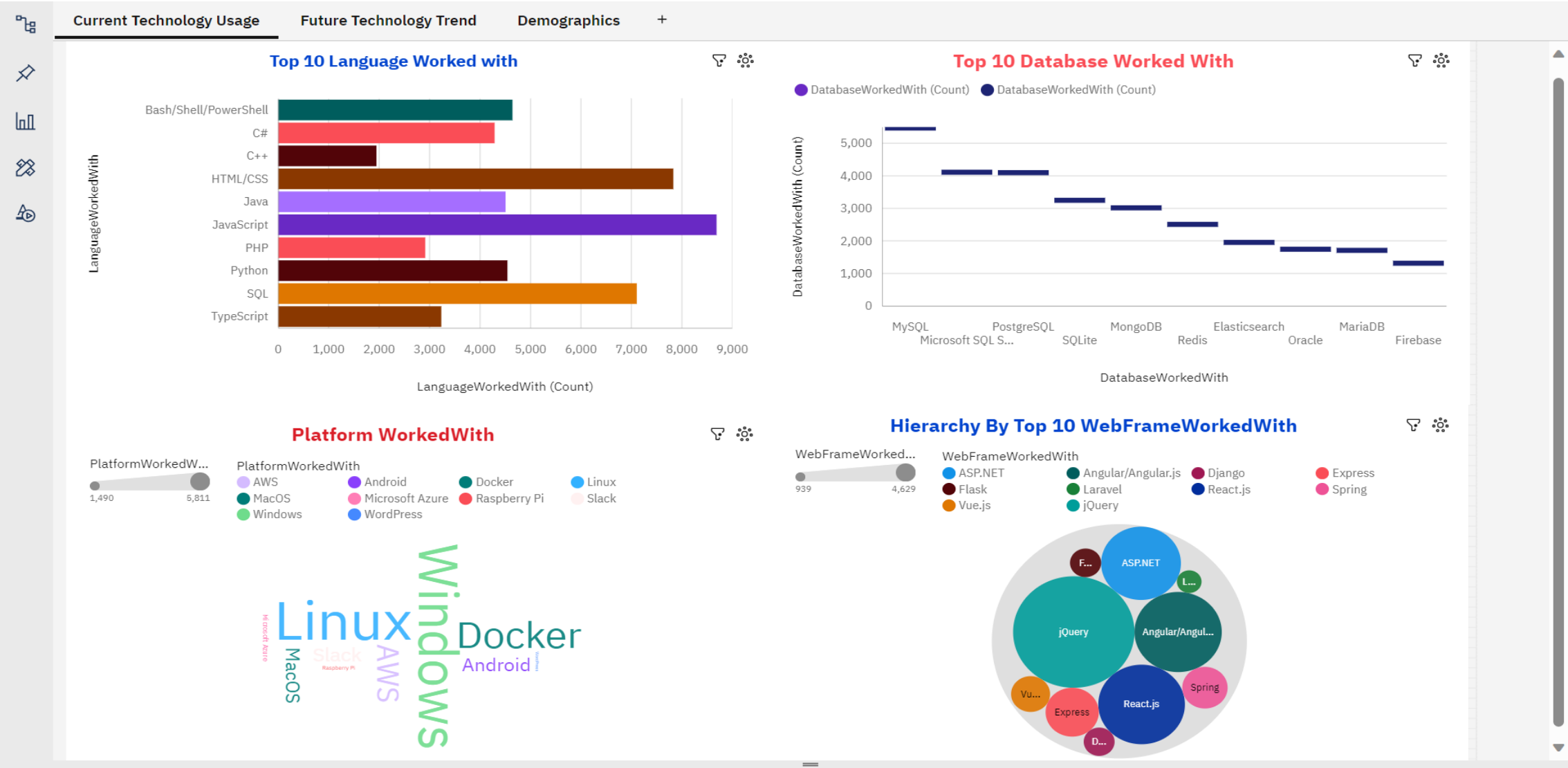
# DASHBOARD

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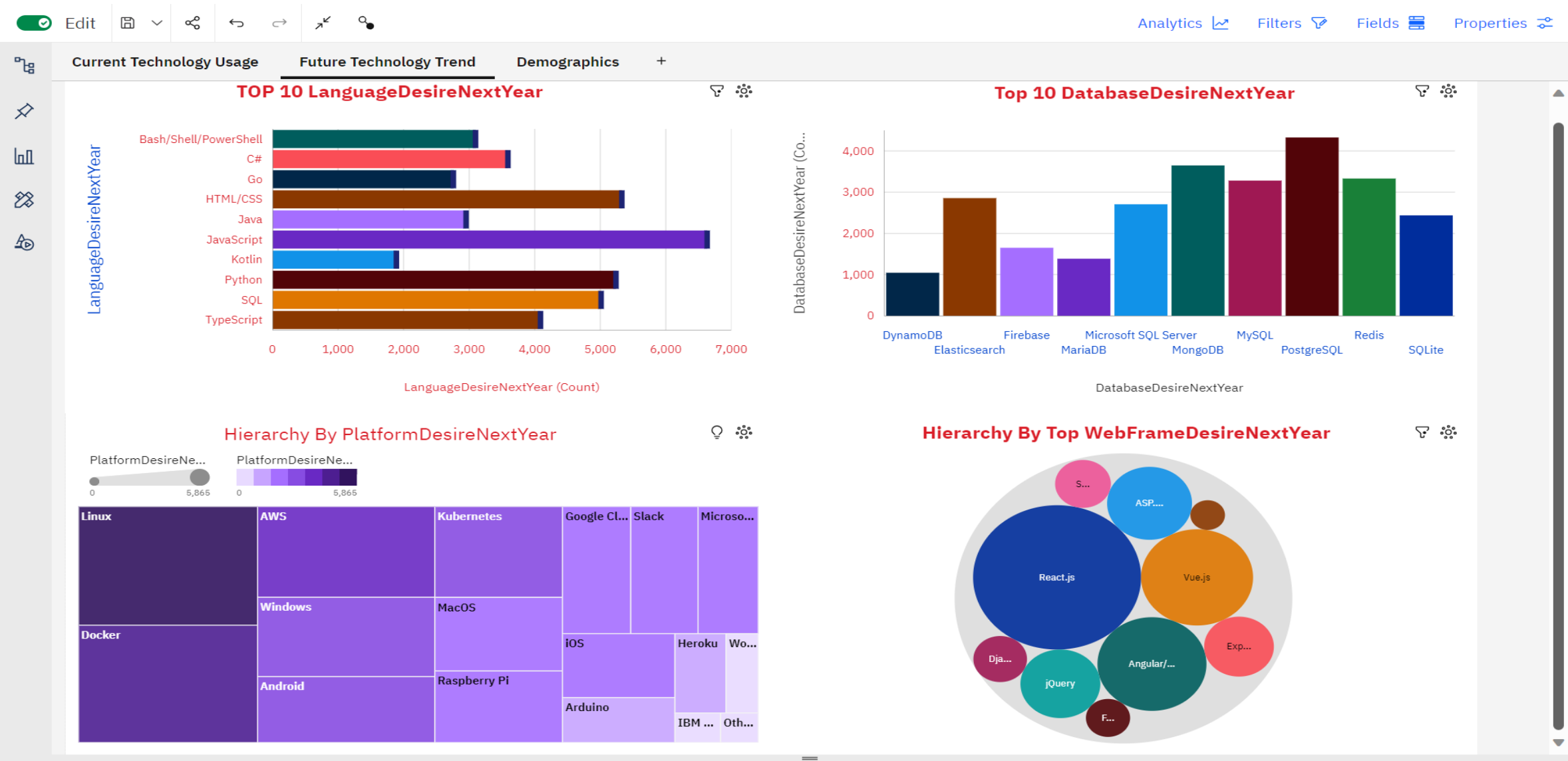


[Assignment Dashboard \(ibm.com\)](https://ibm.com)

# DASHBOARD TAB 1




# DASHBOARD TAB 2



# DASHBOARD TAB 3



Analytics  Filters  Fields  Properties 



### Current Technology Usage

### Future Technology Trend

## Demographics

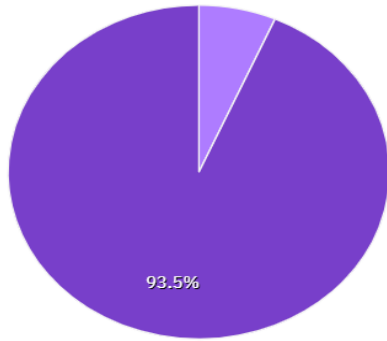
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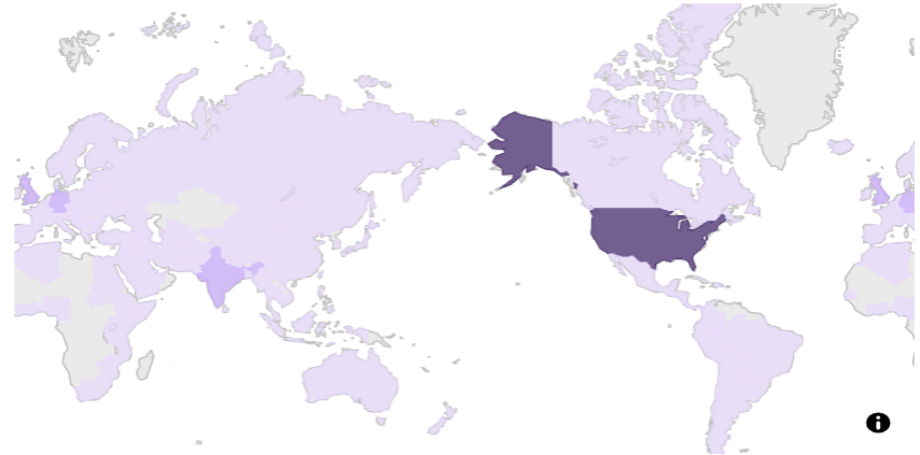
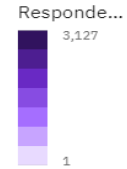
### Respondent classified by Gender

Gender

● Woman ● Man



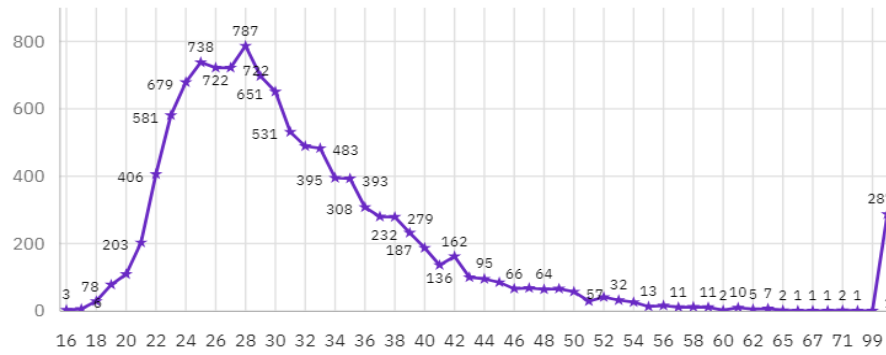
### Respondent count for Country regions



## Respondent Count by Age



Respondent (Count distinct)



Age

### Respondent by Gender

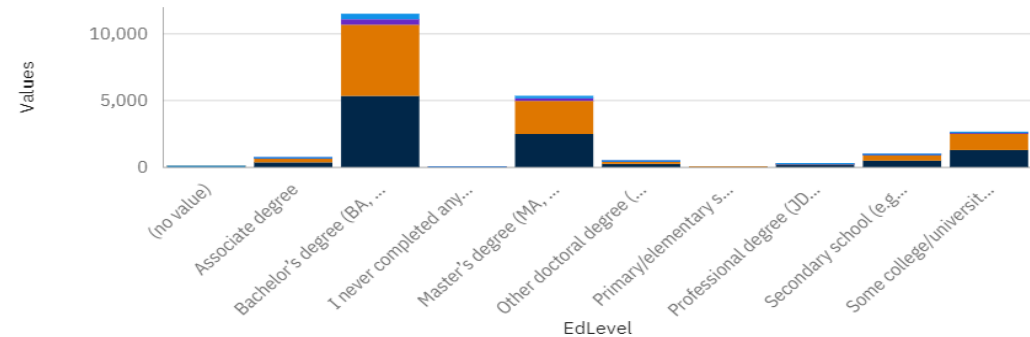
## Gender - Measures

● Man | EdLevel

● Man | Respondent

● Woman | EdLevel

● Woman | Respondent



# DISCUSSION

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- For the analysis the data represented by the graphs to analyze the insights .
- Used bar graph for trending and future trending technologies.
- Map is used for visualize the country wise usage of each technology.



# OVERALL FINDINGS & IMPLICATIONS

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## Findings

- From the dashboard we can observe the current trending language is Java script and html.
- Presently most of users are using the database of sql and ms sql server.
- The familiar platform of current trend is windows and linux.

## Implications

- In future analysis the trending language and database are changing ,for future showing interest in python and non relational data base.
- For gender wise analysis most of the men's are higher percentage.
- From the map the united staes having higher count then the other country's.

# CONCLUSION

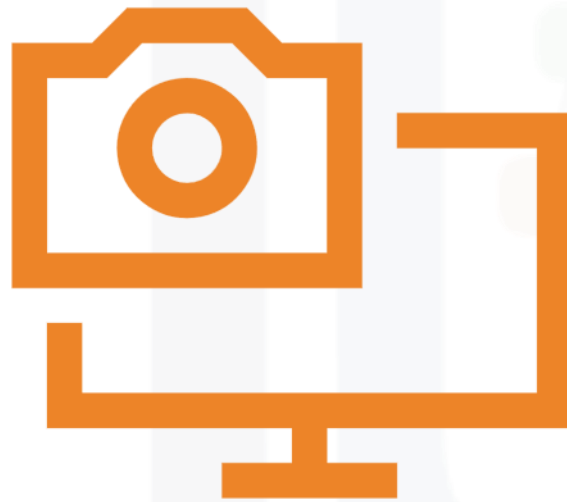
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- From the analysis we can say ,year to year the languages and technologies will be change.
- Based on the current and future data the language adoption will increase.
- Mostly usage count of database is increasing in non- relational database.

# APPENDIX

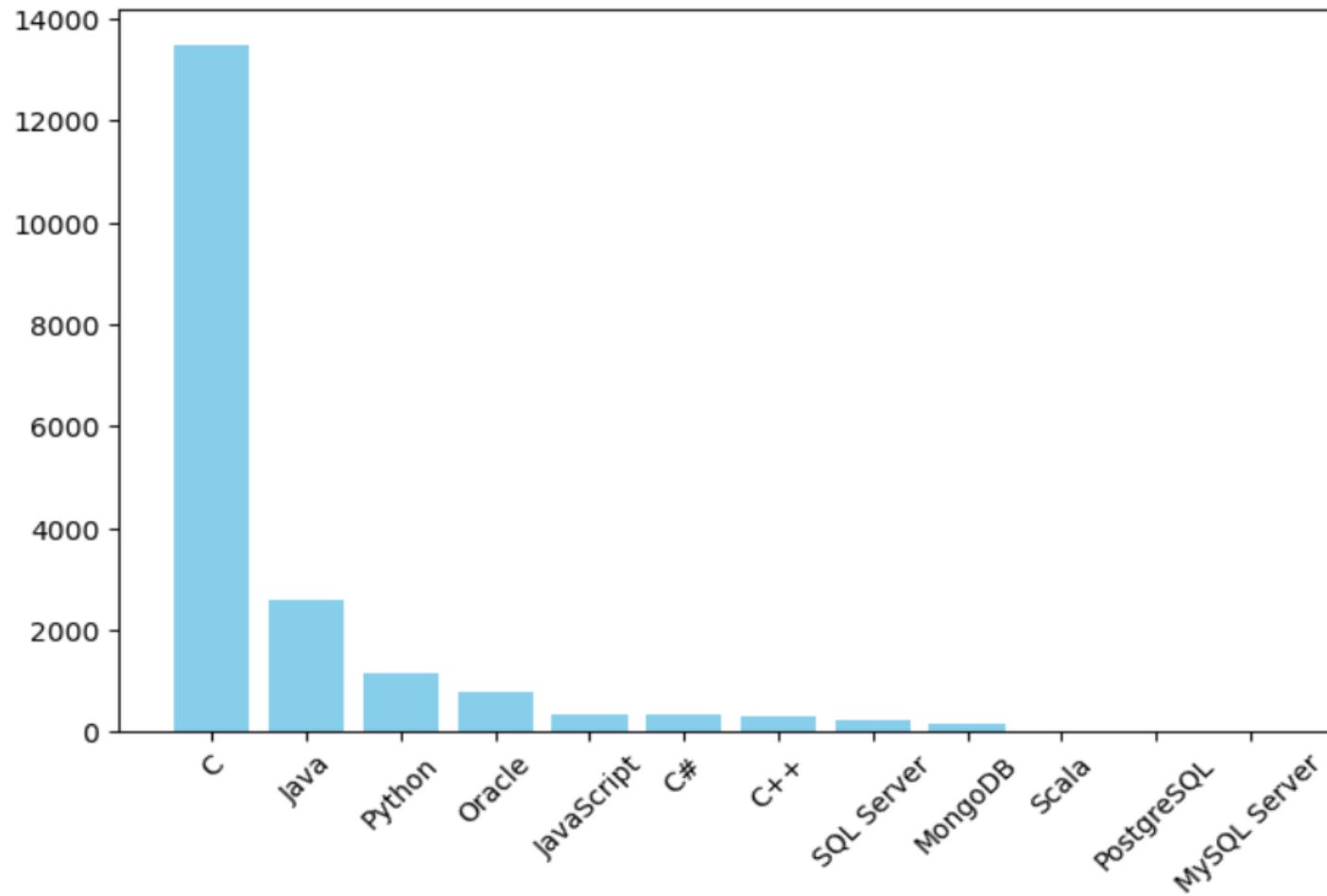
- The below table shows the overall count of data base usage in next year .



	Respondent	DatabaseDesireNextYear	count
0	9	PostgreSQL	4328
1	16	MongoDB	3649
2	9	Redis	3331
3	4	MySQL	3281
4	16	Elasticsearch	2856
5	16	Microsoft SQL Server	2706
6	4	SQLite	2437
7	13	Firebase	1650
8	20	MariaDB	1385
9	19	DynamoDB	1044
10	49	Cassandra	1003
11	22	Oracle	870
12	44	Other(s):	645
13	23	Couchbase	390

# JOB POSTINGS

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# POPULAR LANGUAGES

- Present that data using a bar chart here. Order the bar chart in the descending order of salary.

