Analysis On Stack Overflow Survey Data

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EXECUTIVE SUMMARY

- Analysis provides insights into the trend of the trends and characteristics of developers across the world.

- Analysis provides the current and future trend of :
  - Languages
  - Databases
  - Platforms
  - Web Frames

INTRODUCTION

- The analysis of Stack Overflow Survey Data is a descriptive analysis that provides insights into the characteristics and trends of the developers and technologies.

- Questions that the analysis seeks to answer include:
  - What is the demographic profile of developers, including age, gender, and location.
  - What is the educational background of developers.
  - What are the most trending programming languages, Databases, Working Platforms and Web Frames in current time.
  - What are the most trending programming languages, Databases, Working Platforms and Web Frames in Future.
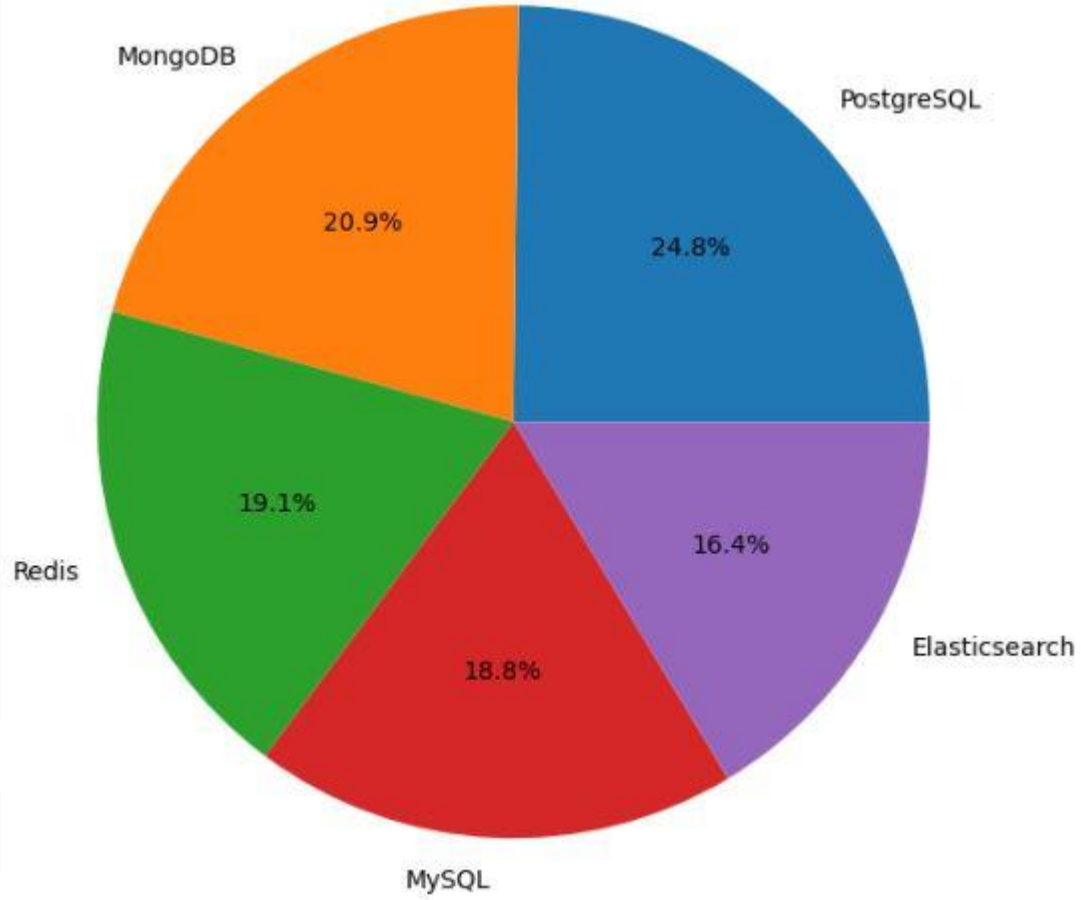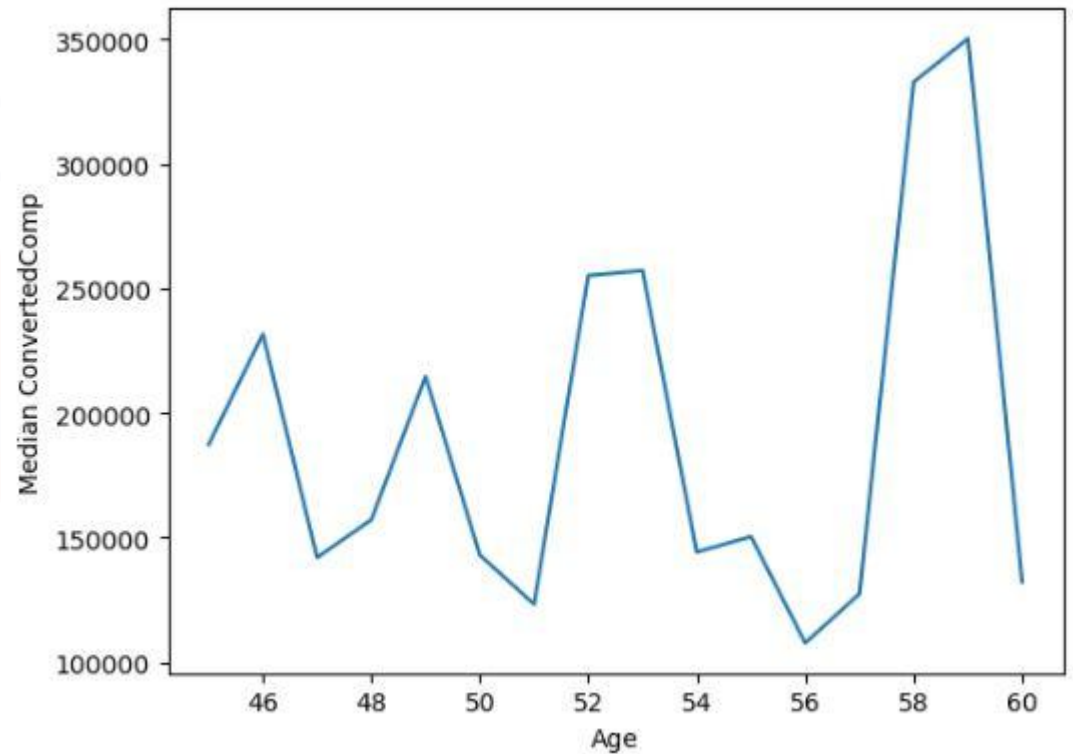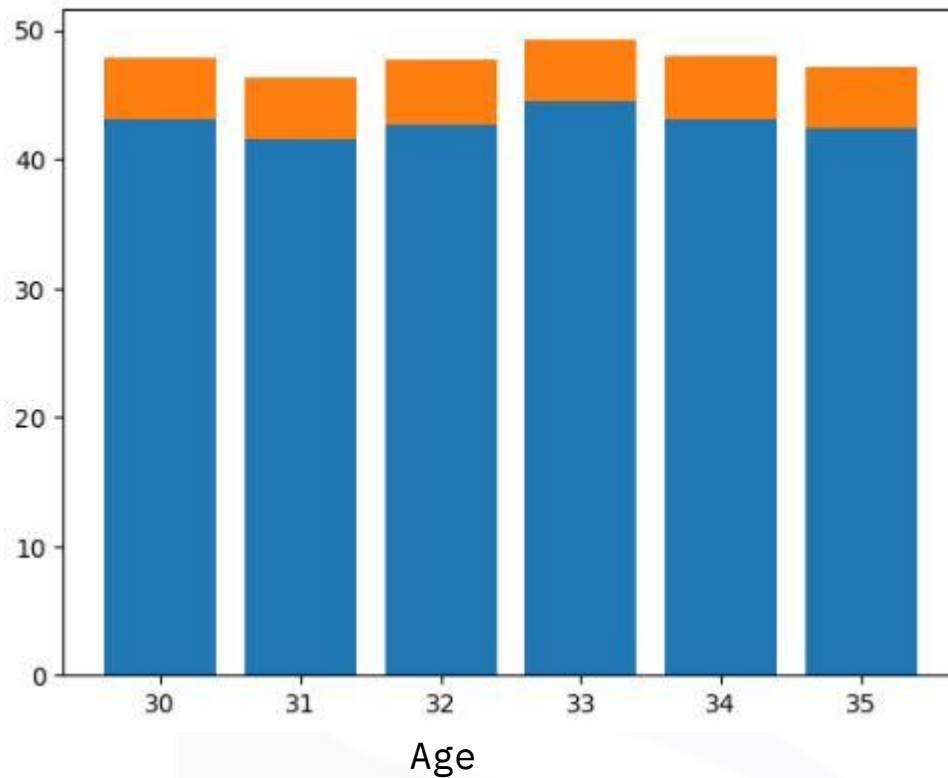
METHODOLOGY

- Methodology that involves the following steps:

  - Data collection: we collected the data from stackoverflow survey data.
  - Data cleaning and preprocessing: this processes was done by using pandas, numpy.
  - Data analysis : this processes was done by using pandas, matplotlib, seaborn.

  Overall, the methodology used in the analysis of Stack Overflow Survey Data is robust and provides valuable insights into the developer community's current and future state.
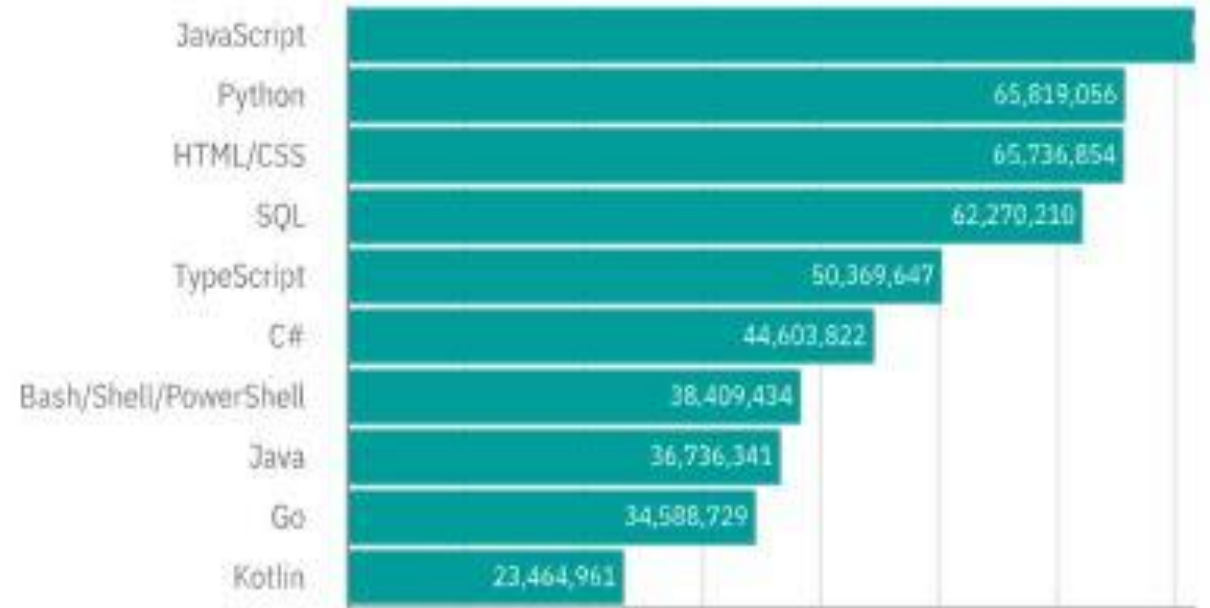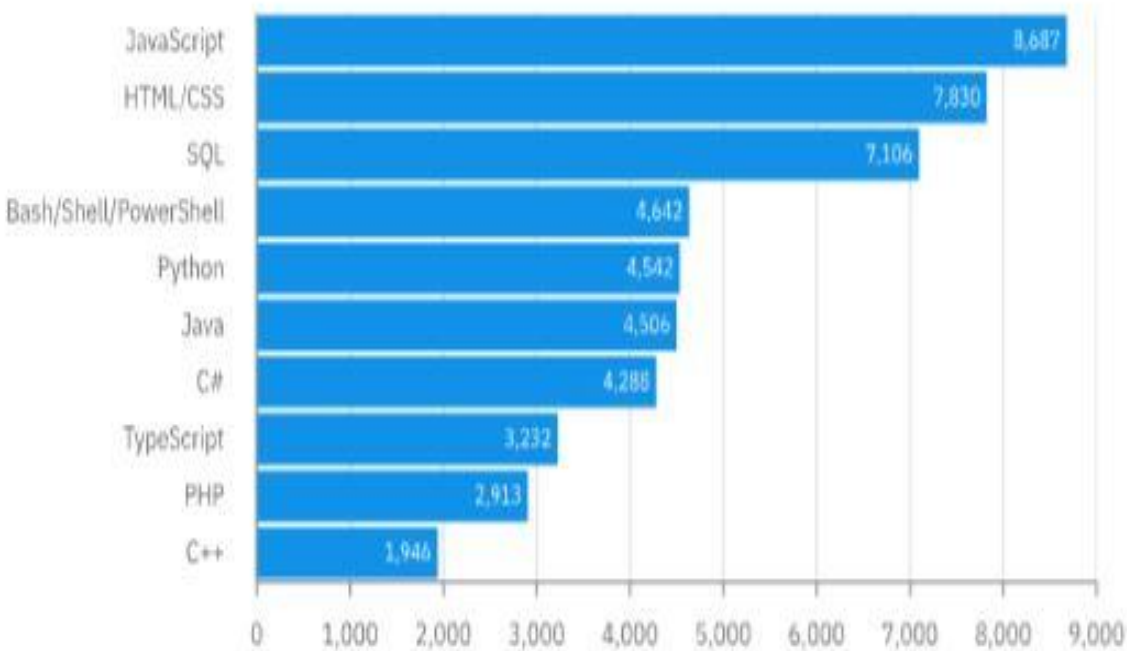
RESULTS

RESULTS

PROGRAMMING LANGUAGE TRENDS

Current
Year

Next
Year

Current Year	
JavaScript	8,687
HTML/CSS	7,830
SQL	7,106
Bash/Shell/PowerShell	4,642
Python	4,542
Java	4,506
C#	4,288
TypeScript	3,232
PHP	2,913
C++	1,946

Next Year	
JavaScript	
Python	65,819,056
HTML/CSS	65,736,854
SQL	62,270,210
TypeScript	50,369,647
C#	44,603,822
Bash/Shell/PowerShell	38,409,434
Java	36,736,341
Go	34,588,729
Kotlin	23,464,961

PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS
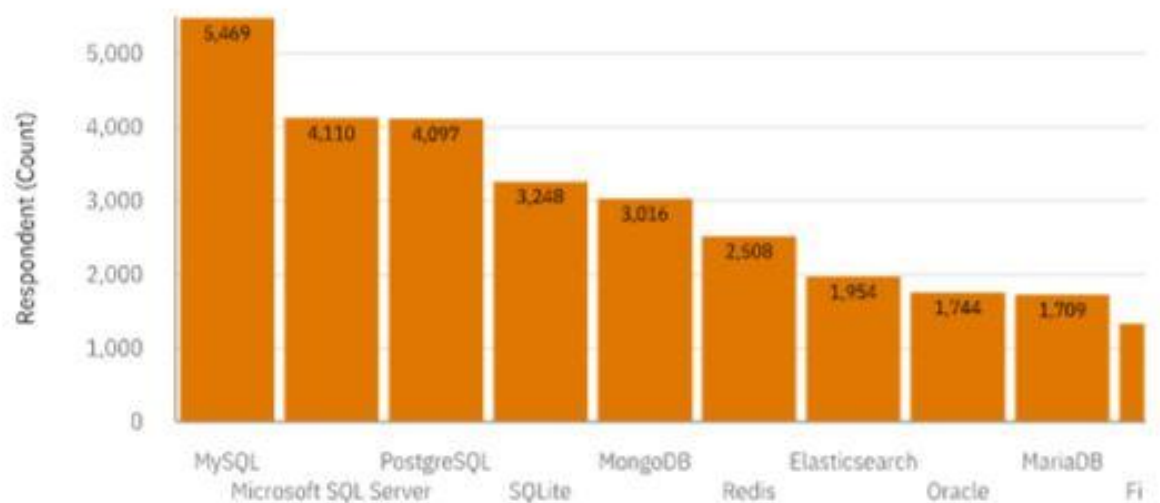
Findings

- JavaScript was most trending programing langage.
- The trend of python was increased in future.
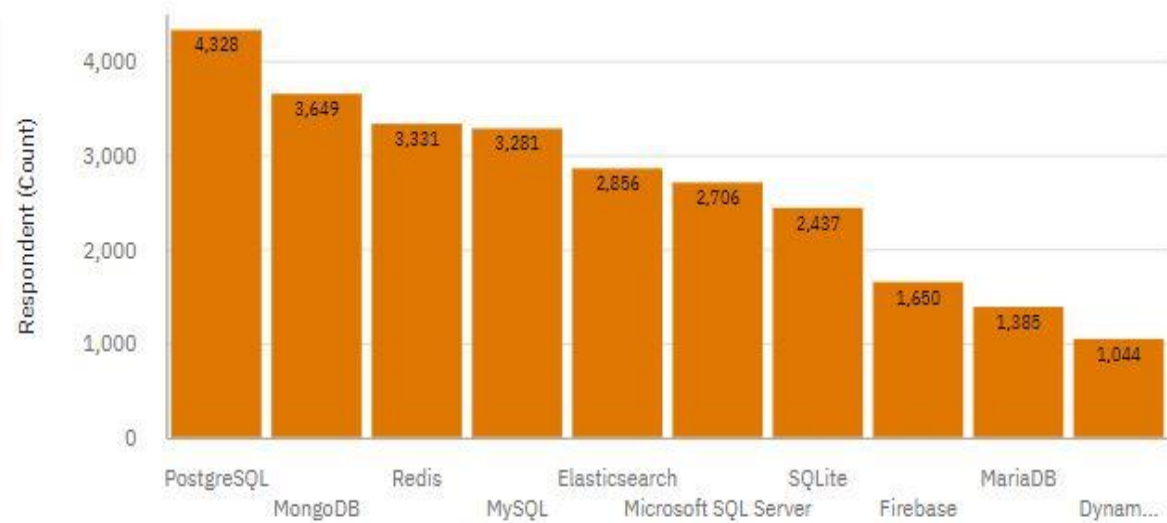- C++ and PHP are not on trend in future.

Implications

- developers should now JavaScript.
- Start learning Python.
- No need to stay just with C++ and php.

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DATABASE TRENDS

Current
Year

Next
Year

DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Trend of PostgreSQL and MongoDB was increased in future.
- MySQL in future still on trending.
- Trend of Oracle was decrease.

Implications

- Start learning PostgreSQL and MongoDB.
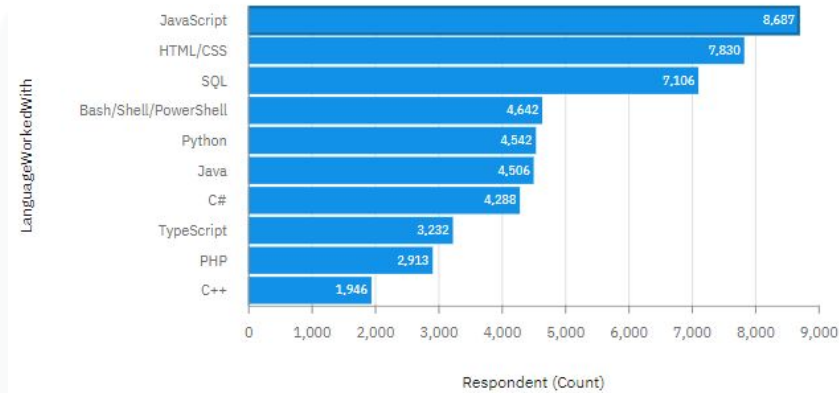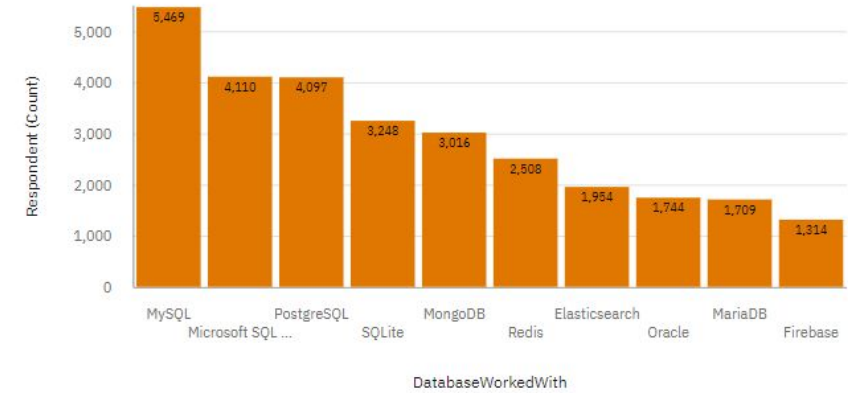- Master the MySQL.
- Try to avoid to learn Oracle.

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DASHBOARD

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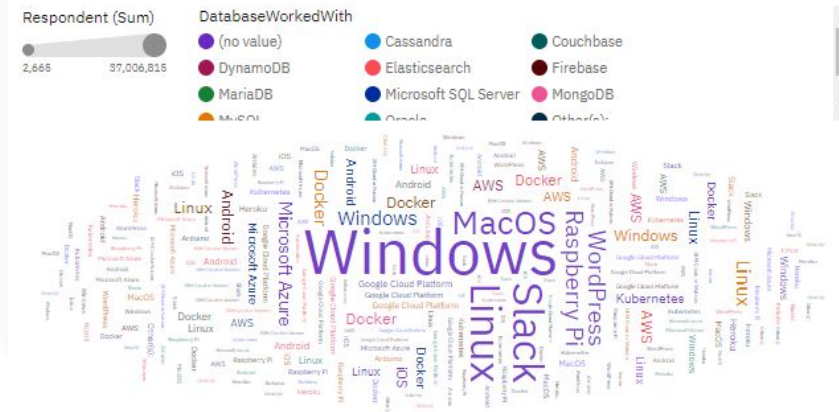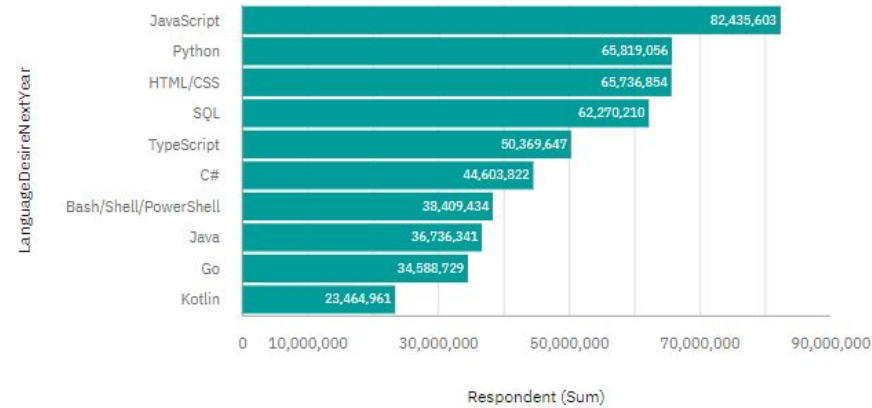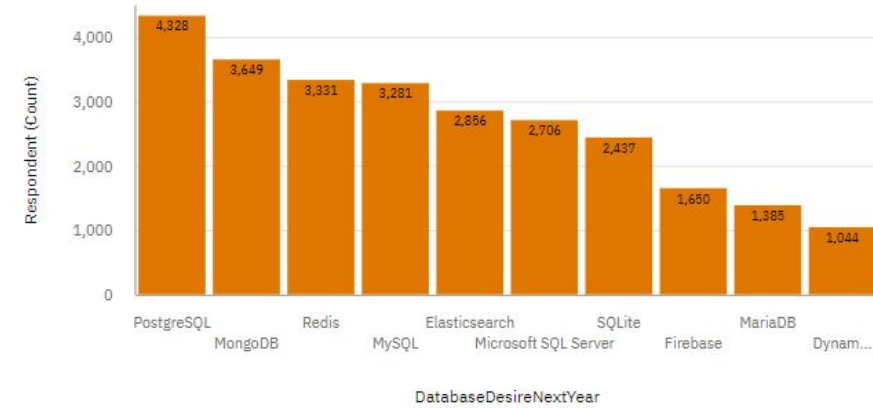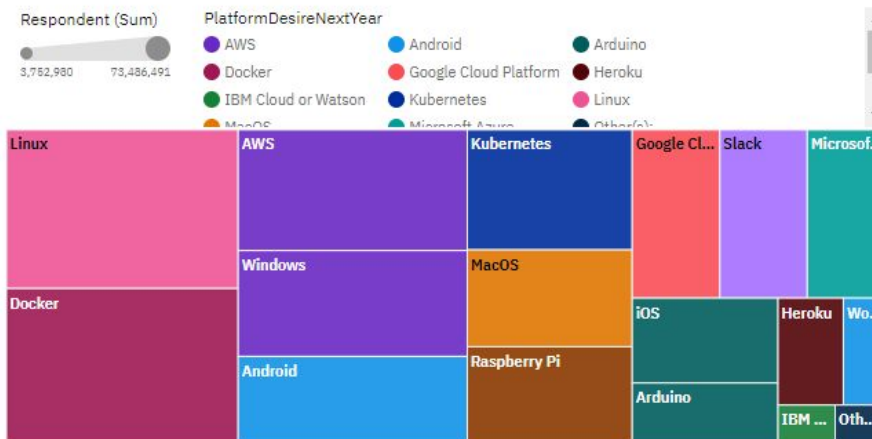
DASHBOARD TAB 1
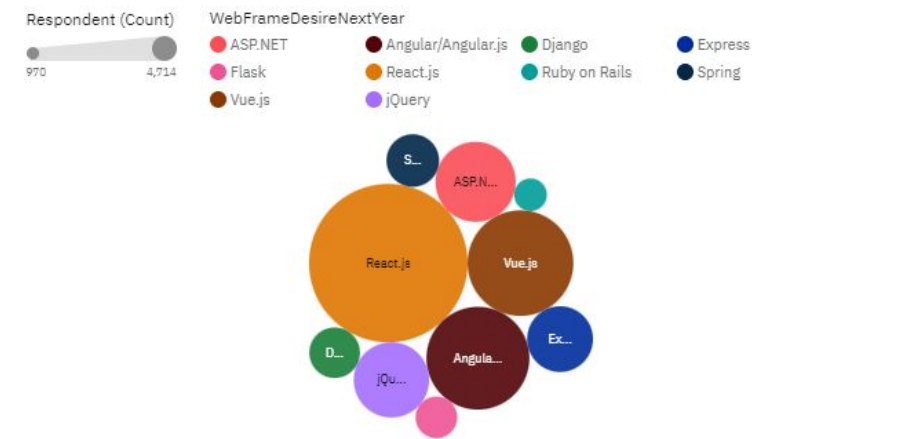
DASHBOARD TAB 2

DASHBOARD TAB 3
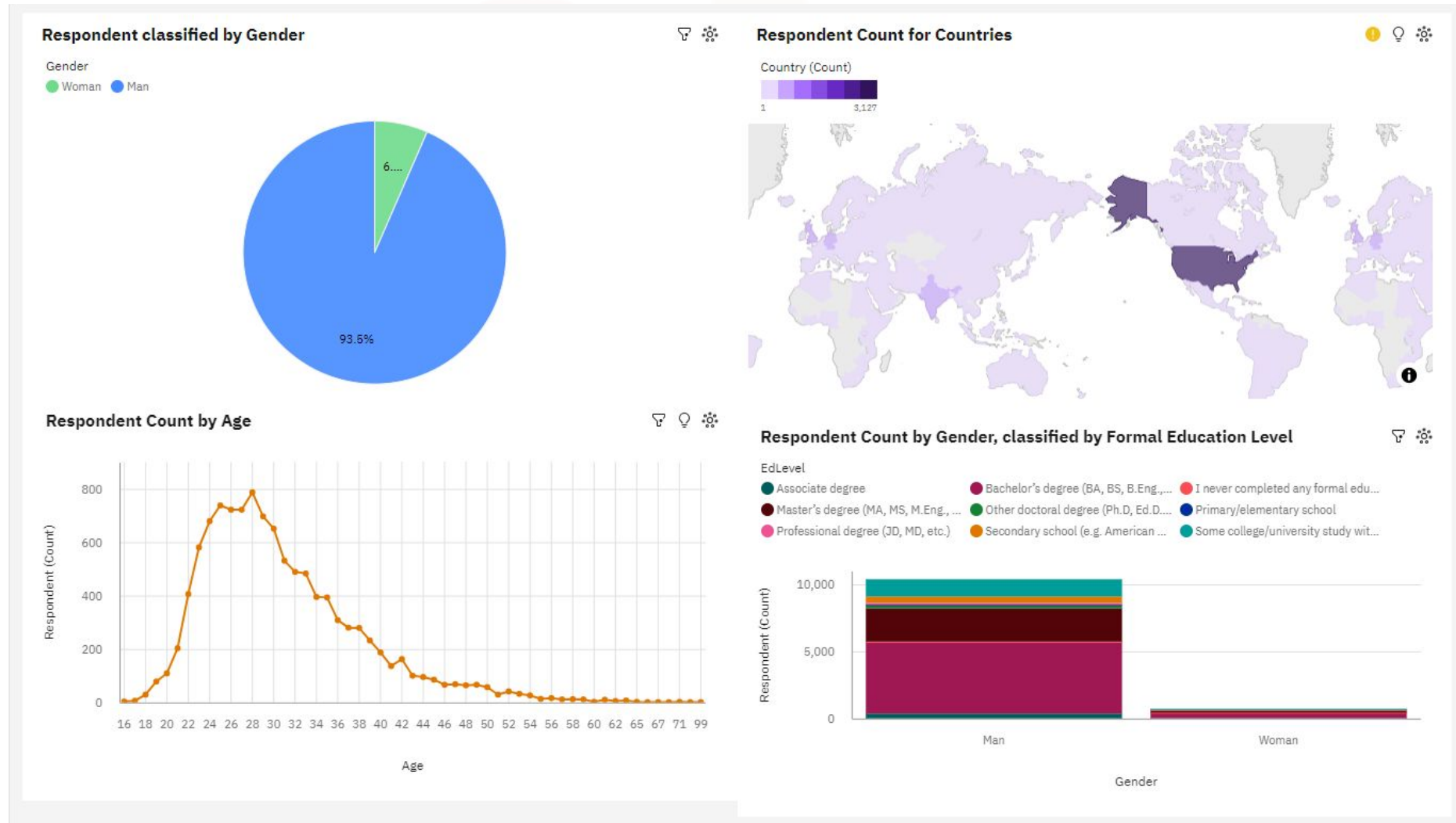
DISCUSSION

Through the Analysis we find some insides as follow :

1. Python, JavaScript, Html/Css and SQL are most demanded programming languages.

Therefor developers should know those languages very well.

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OVERALL FINDINGS & IMPLICATIONS

Findings

- Python,JavaScript,Html/Css and Sql are trending programing languages.
- PostgreSql, MySQL and MongoDB are trending Database.
- Most of the Developers are Men in gender.

Implications

- Should learn those languages.
- Should familiar with those databases
- There are more less competition for womens in this field.

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CONCLUSION

- Most of the developers are in the age range of 22-35 years.

- Women developers are very less as compared to men developers.
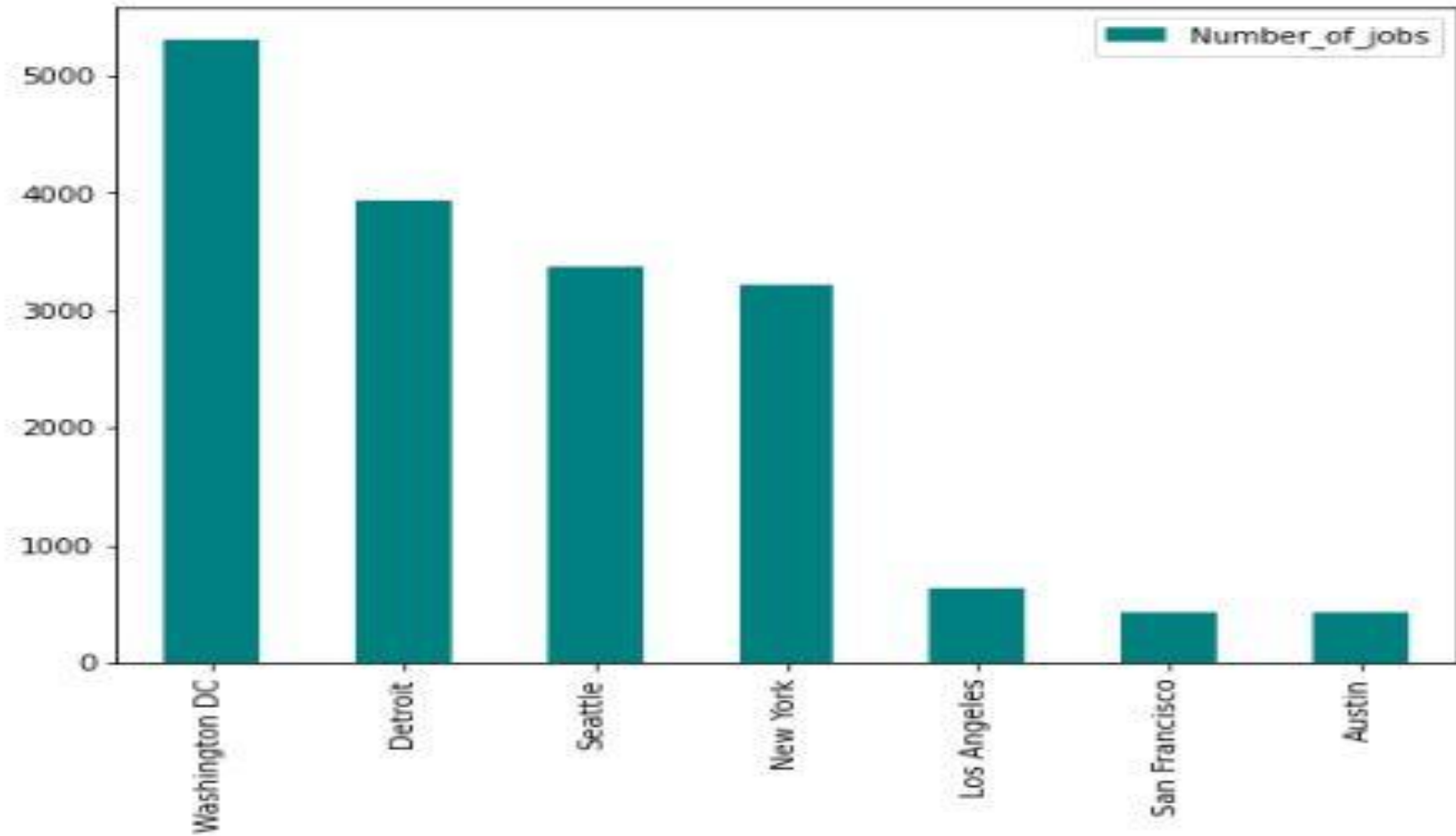
- Most of the developers holds an Professional degree.

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APPENDIX

Data collection: SQLite, pandas

Data cleaning and preprocessing: pandas, numpy

Data analysis : pandas, matplotlib, seaborn.

JOB POSTINGS

POPULAR LANGUAGES