



# An Analysis of current technological trend

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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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- It is data analyze on technology, that is helping to understand usage of technological trends in IT Companies now a day.
- **Here, I display three main technologies used by modern IT companies.**
  - Programing Language
  - Database
  - Web Platform and Web Frame
- It also **demonstrates current and future technological trends.**
- Here, I also display **Demographics Survey.**
- **The country's base and gender base differences are also there.**

# INTRODUCTION

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- To analyze technological trends in software and web development among developers around the world.
- Purpose of this Analysis
  - ❖ Identify the top programming languages, database, platform and web frame skills in demand
  - ❖ Identify skill requirements for future
- Audience for this Presentation
  - Programmers
  - IT industry leaders
  - Students

# METHODOLOGY

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## Data Collection (Sources)

1. <https://www.kaggle.com/promptcloud/jobs-on-naukricom?>
2. GitHub job postings
3. Programming languages annual salary

## Data Wrangling

## Data Exploration

## Data Cleaning

## Data Visualization

Python matplotlib & IBM Cognos

# RESULTS

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5	WorkChallenge
6	LanguageWorkedWith
7	LanguageDesireNextYear
8	DatabaseWorkedWith
9	DatabaseDesireNextYear
10	PlatformWorkedWith
11	PlatformDesireNextYear
12	WebFrameWorkedWith
13	WebFrameDesireNextYear
14	MiscTechWorkedWith
15	MiscTechDesireNextYear

# PROGRAMMING LANGUAGE TRENDS

Current Year

Next Year

## Top 5 programming languages for the current year

● Bash/Shell/PowerShell ● HTML/CSS  
● JavaScript ● Python  
● SQL



## Top 5 programming languages for the next year

LanguageDesireNextYear

● HTML/CSS ● JavaScript ● Python



# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- Java Script is the most popular and trending programming language.
- SQL and HTML are also in trend.
- Python is becoming more popular day by day.

## Implications

- Every software developer should be familiar with Java script.
- Due to easy learnt, python becoming popular day by day.
- In AI field python is popular programming language.

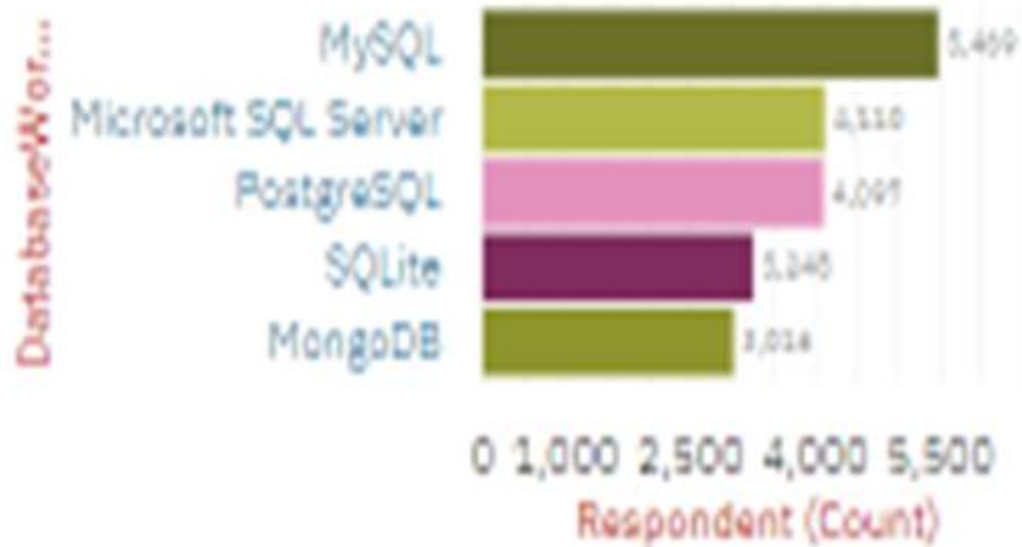


# DATABASE TRENDS

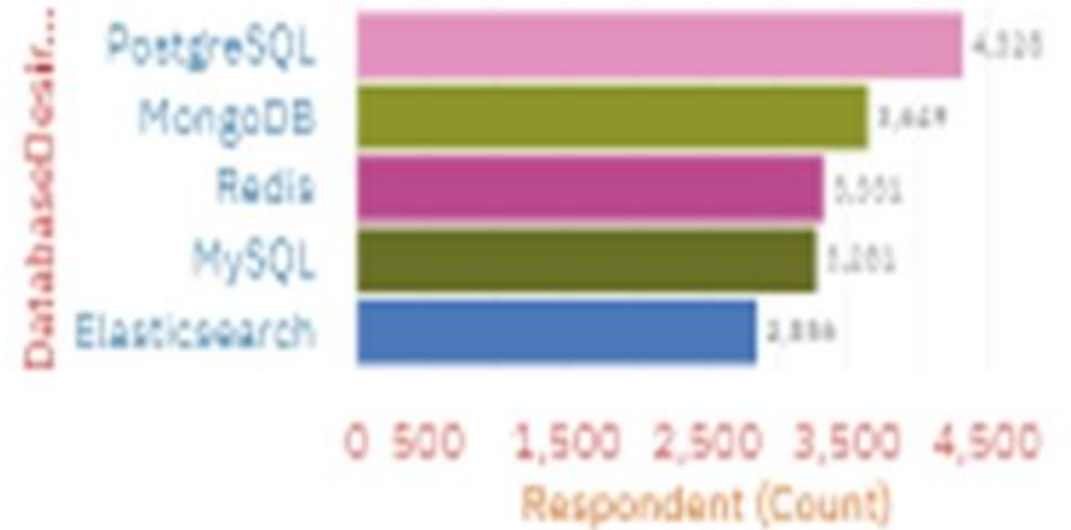
Current Year

Next Year

Top 5 databases for the current year



Top 5 databases for the next year



# DATABASE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- **MYSQL** is most popular DBMS now a day. It is used by majority IT Company. **MYSQL is free and easy to access.**
- There are still a lot of companies using Microsoft SQL Server
- **MongoDB** is the most favorable NoSQL database.

## Implications

- NoSQL databases will make an impact for relational databases.
- Software development and Big Data technology still requires SQL.
- Open-source databases like **MySQL and PostgreSQL** still preferable

# DASHBOARD

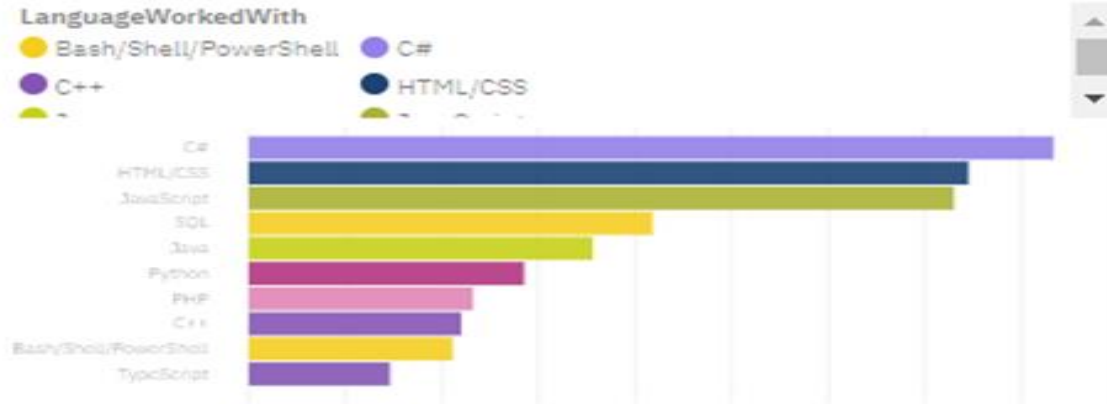
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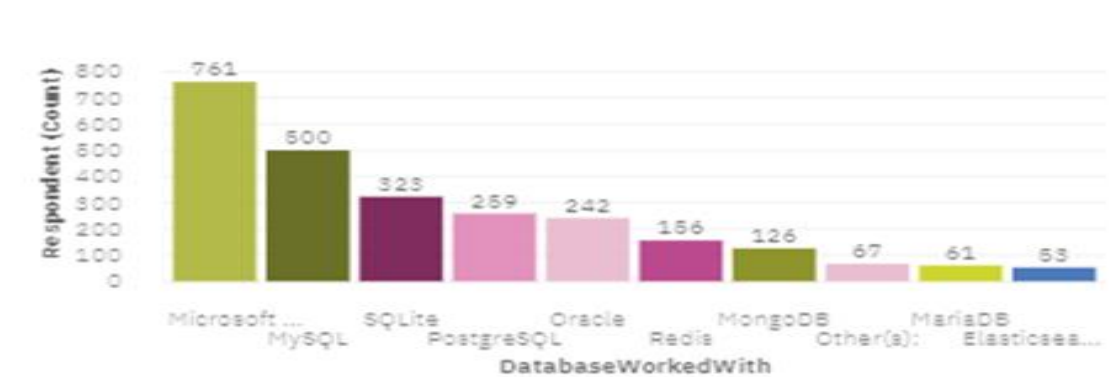
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# DASHBOARD TAB 1

## Top 10 Current Year Language Worked With



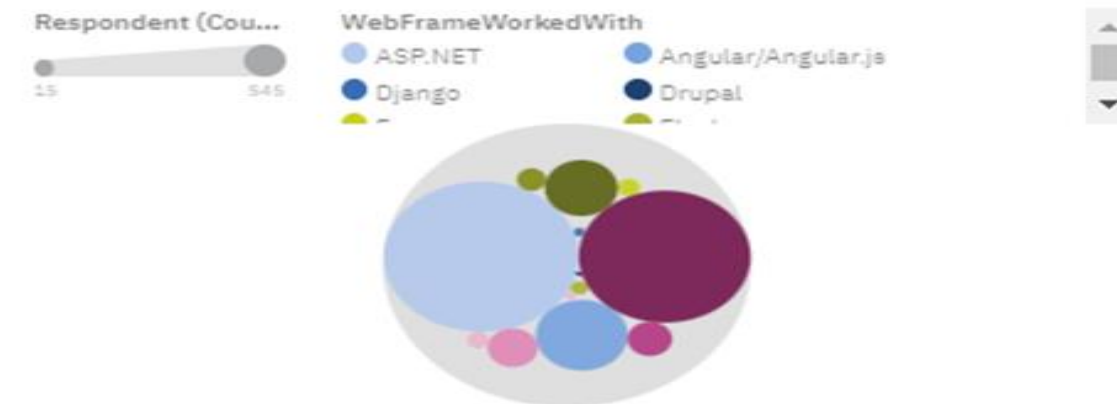
## Top 10 Current Year Database Worked With



## Current Year Platform Worked With

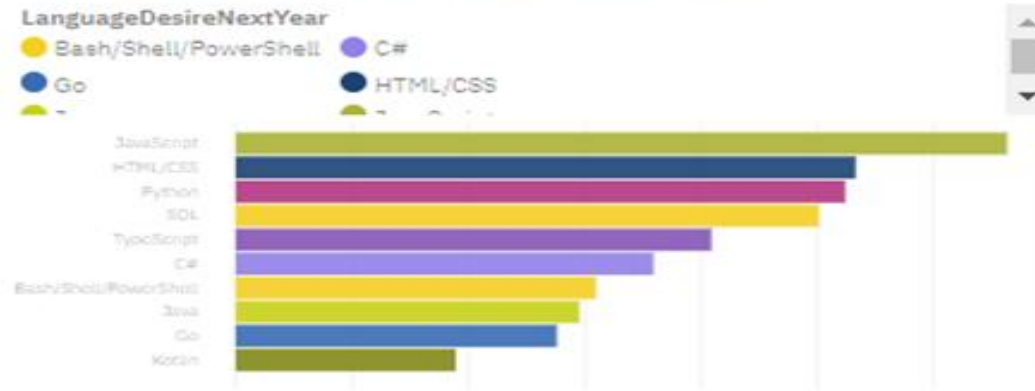


## Top 10 Current Year Web Frame

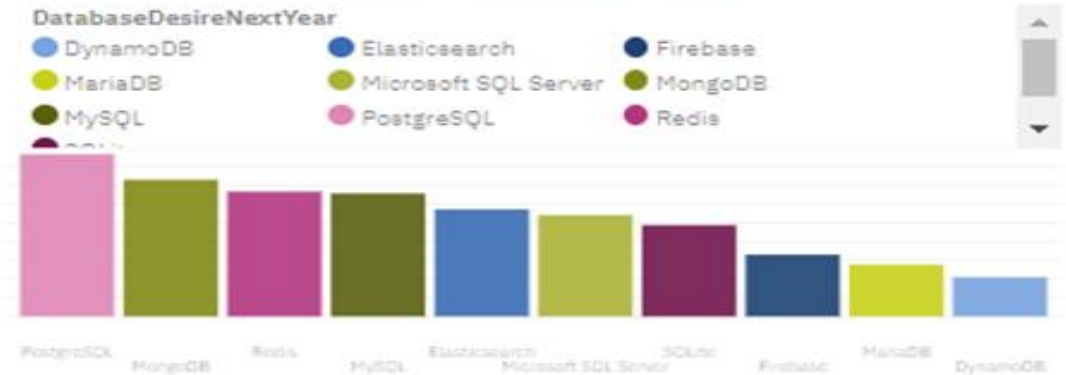


# DASHBOARD TAB 2

## Top 10 Language Desire Next Year



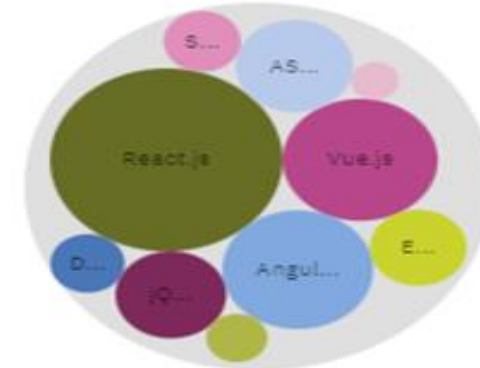
## Top 10 Database Desire Next Year



## Platform Desire Next Year



## Top 10 WebFrame Desire Next Year

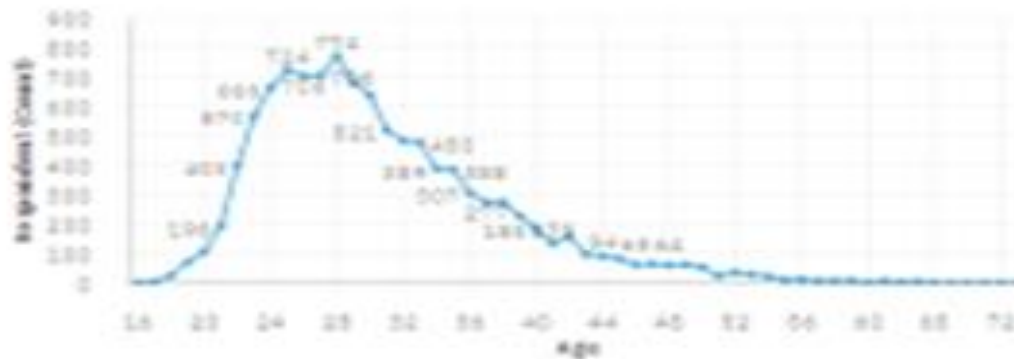


# DASHBOARD TAB 3

Respondent classified by Gender



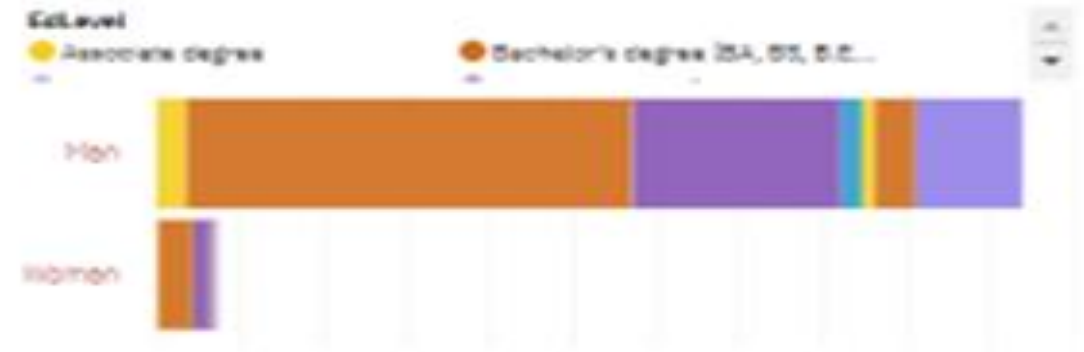
Respondent Count by Age



Respondent Count for Countries



Respondent Count by Gender, classified by Formal Education Level



# DISCUSSION

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- Age and Gender discrimination in IT Sector.
- Salary is also depend upon education qualification, experience and software comfortability.
- Technology Usage Trend Now and Future.



# OVERALL FINDINGS & IMPLICATIONS

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## Findings

- New technological trends appear every year.
- Compared to men, women work fewer jobs.
- **SQL and Python** are the most popular.

## Implications

- **Programmer must learnt the latest technology.**
- More countries should have the equal chance to be exposed to new technology
- **There are must be given equal opportunity.**



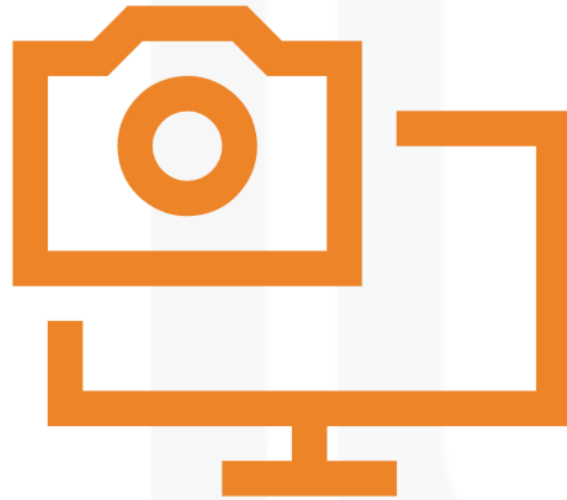
# CONCLUSION

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- Programming Languages, Database, Platform and Web frame Trends change day by day.
- Employment varies on Demographics Trends • Gender and Education
- Salary depends on experience and usage of trending software.
- Women are less employed than man.

# APPENDIX



## Compared to age and gender in the employment survey



## Contrasting education and employment



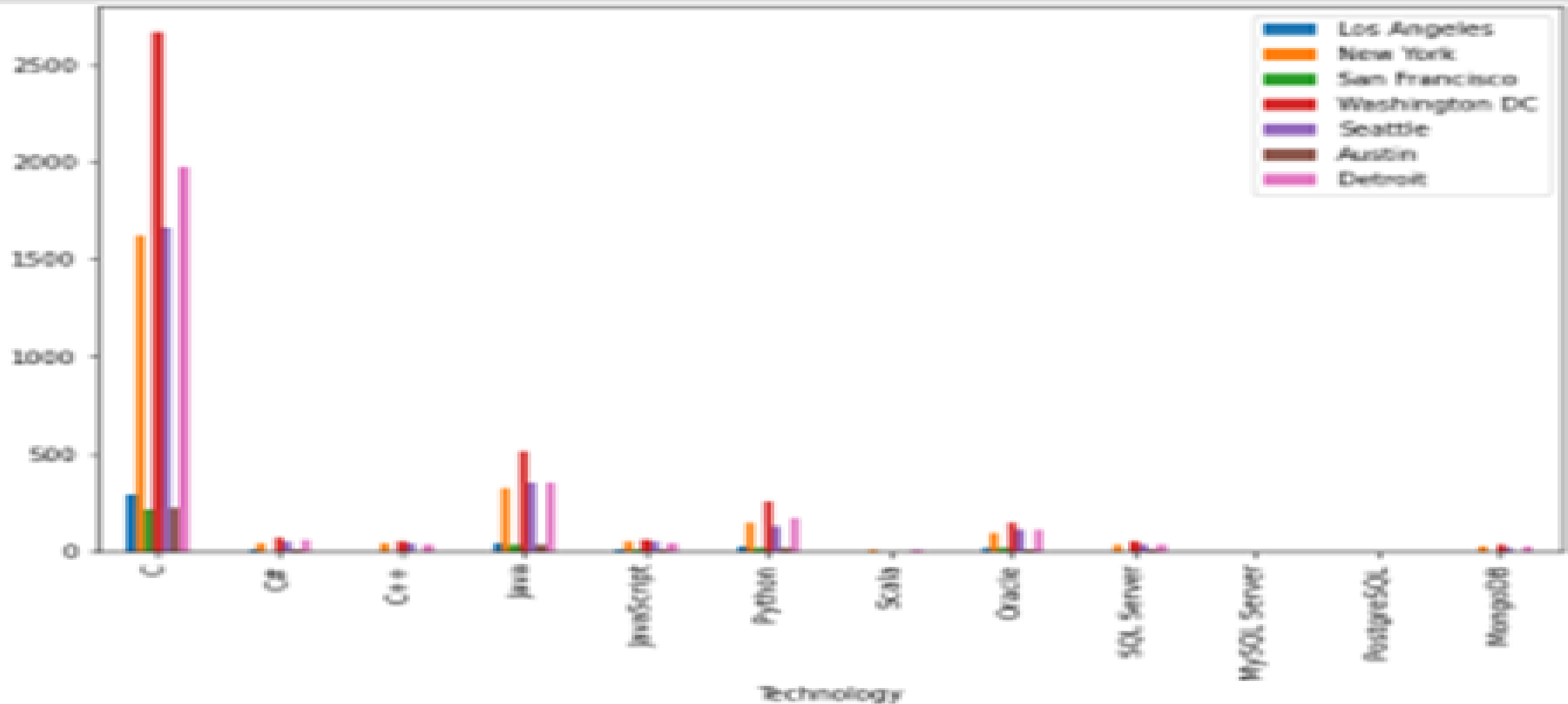
## Dependents count on Gender Base



## Work week Hours depend upon Work Location



# JOB POSTINGS



# POPULAR LANGUAGES

