Emerging Programming Skills in the IT Sector

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IBM D

SKILLS NETWORK

OUTLINE

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- Methodology
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  - Dashboard
- Discussion
  - Findings & Implications
- Conclusion
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EXECUTIVE SUMMARY

- Programming skills that are currently in demand in the IT industry.
  - Programming languages that are mostly worked with
  - Programming languages that are mostly desired
- Databases that are mostly used by these professionals
- IDE platforms that are mostly used by professionals
- Available jobs in the IT industry

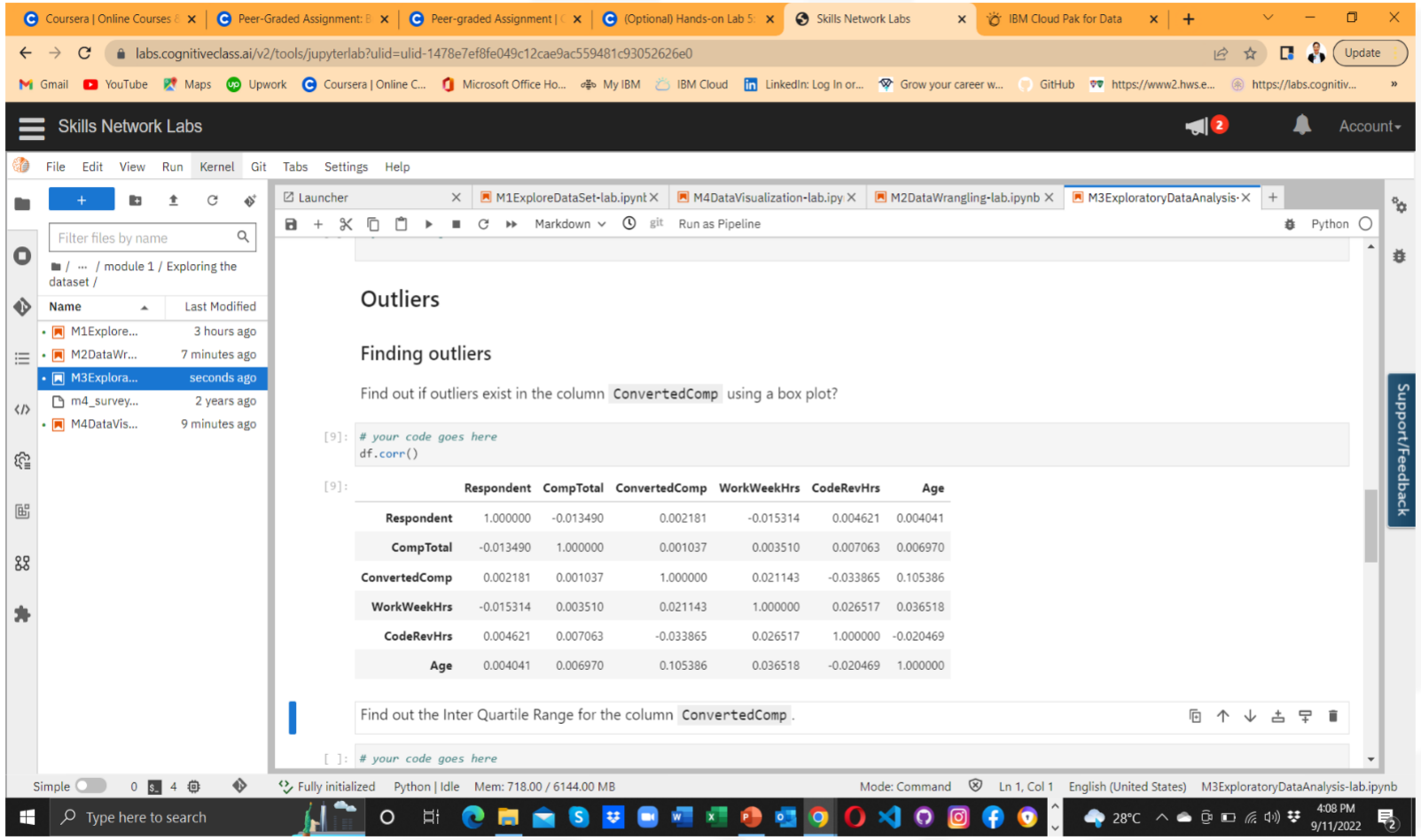
INTRODUCTION

- This report gives in-depth knowledge on what is going on in the IT sector in terms of user experience
- Helping the IT and Business consulting firms to better understand their workforce interests, the tools their workforces are better working with
- And how the organizations can have a direction on what their lags and deficits are and how they can better serve the engineers and public at large

METHODOLOGY

- One of the data sources used for this analysis is from APIs
- Datas were also collected from the websites using webscrapping
- Also some relational databases were used to gather data

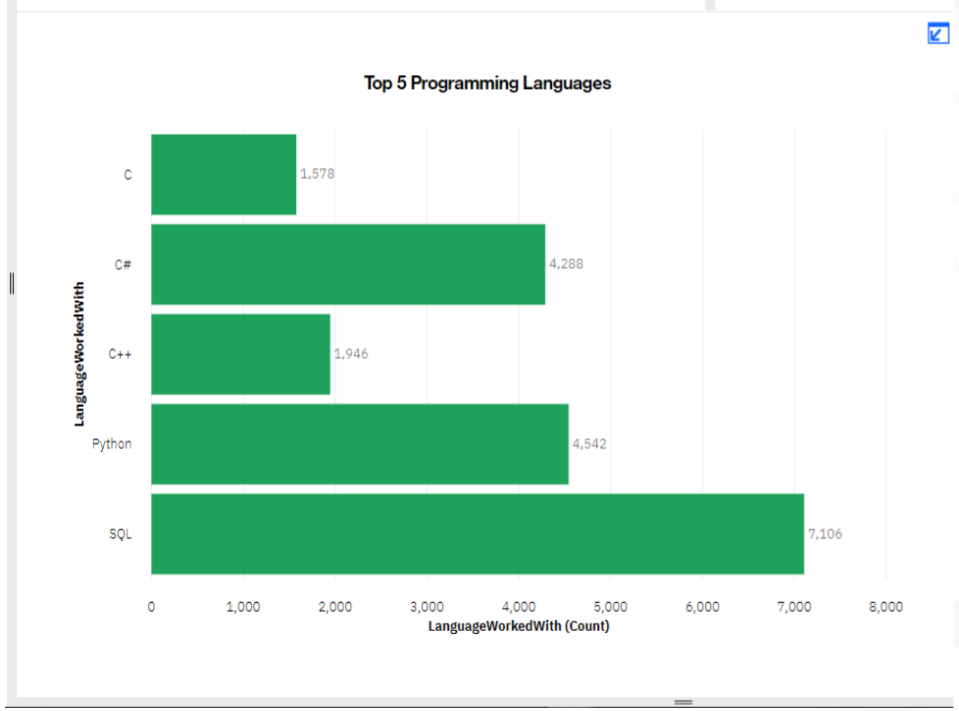
RESULTS



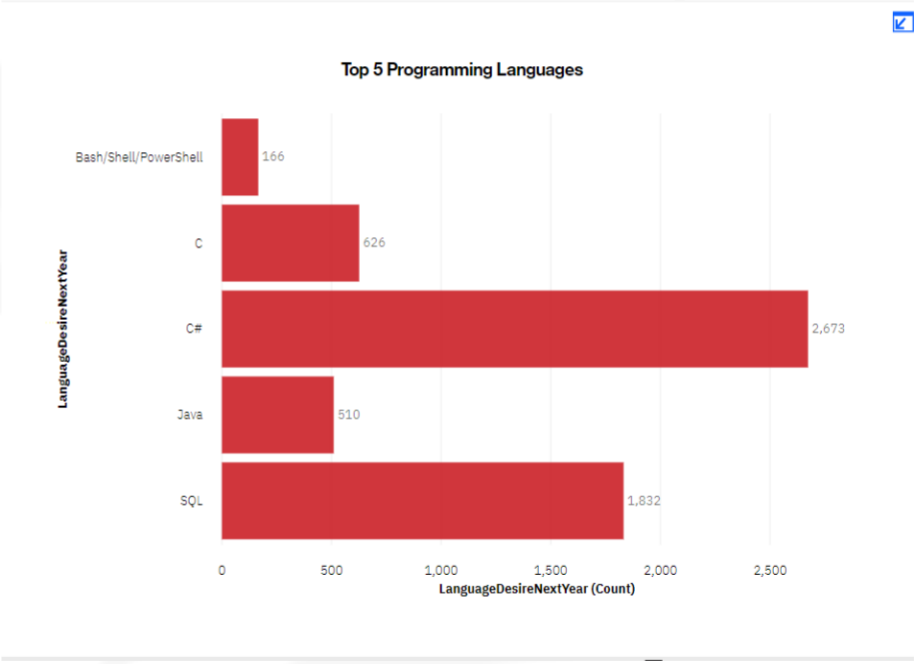
	Respondent	CompTotal	ConvertedComp	WorkWeekHrs	CodeRevHrs	Age
Respondent	1.000000	-0.013490	0.002181	-0.015314	0.004621	0.004041
CompTotal	-0.013490	1.000000	0.001037	0.003510	0.007063	0.006970
ConvertedComp	0.002181	0.001037	1.000000	0.021143	-0.033865	0.105386
WorkWeekHrs	-0.015314	0.003510	0.021143	1.000000	0.026517	0.036518
CodeRevHrs	0.004621	0.007063	-0.033865	0.026517	1.000000	-0.020469
Age	0.004041	0.006970	0.105386	0.036518	-0.020469	1.000000

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

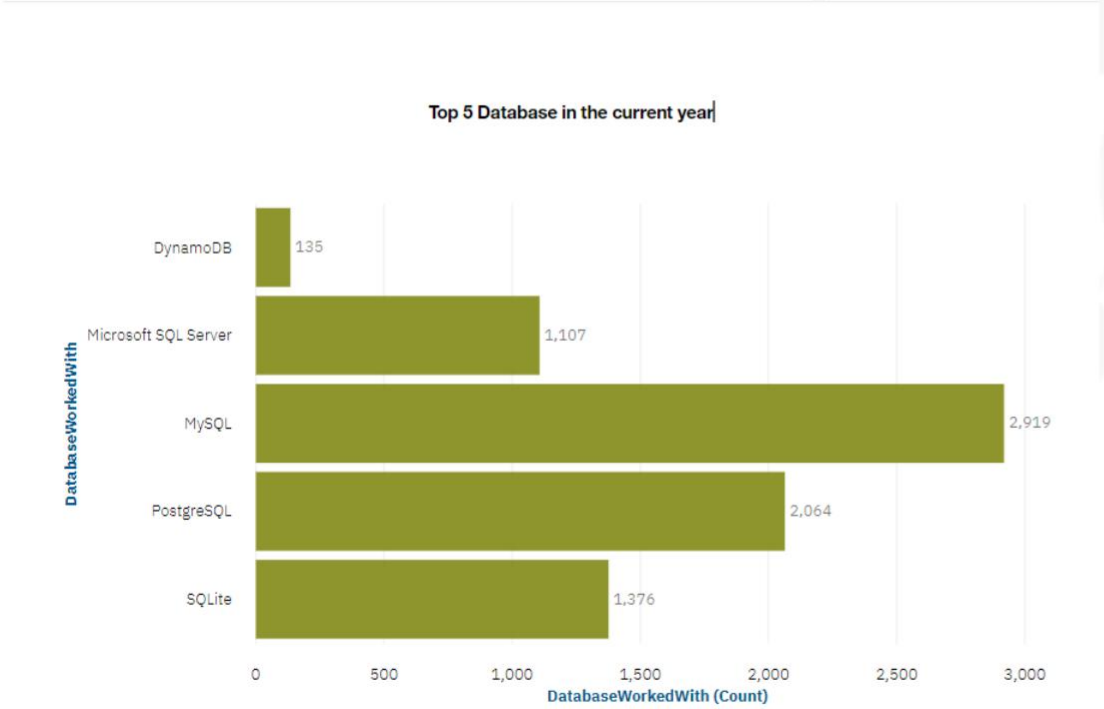
- According to the data, the most currently used programming language by respondents is the SQL with the value of 7,106.
- Followed by Python programming language with 4,542 respondents.
- Then C# with respondents of about 4,288.

Implications

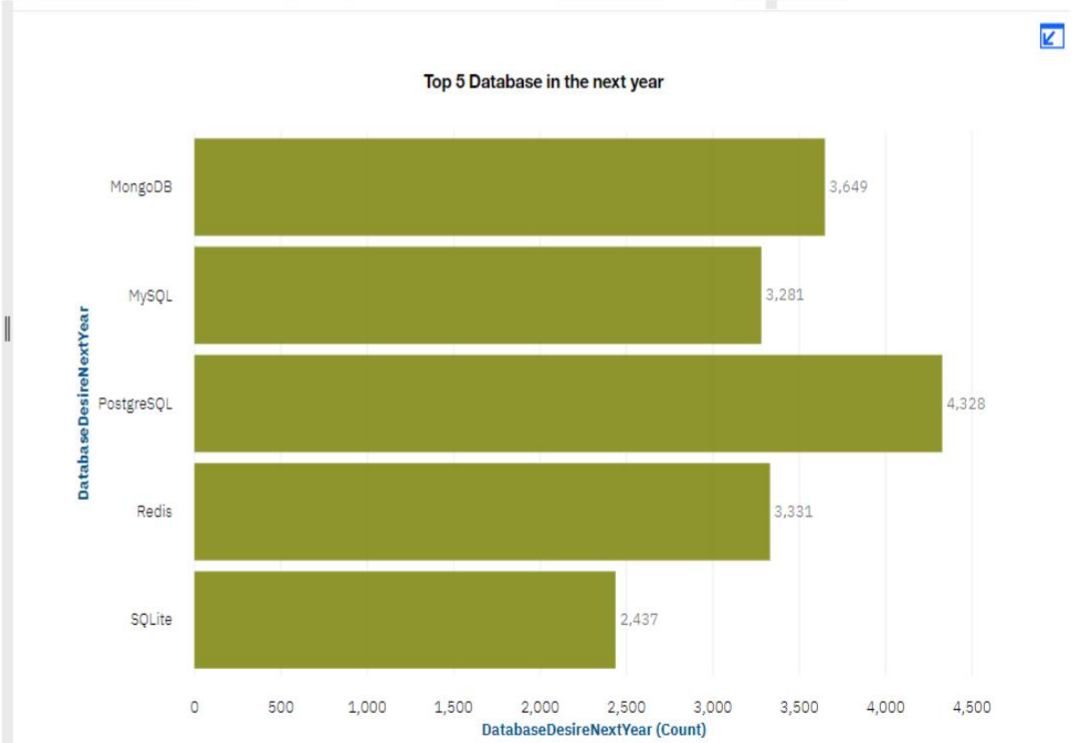
- But unfortunately, in the coming year, C# will be the most desired programming language engineers will use. With 2,673 projected respondents
- Next in line is the SQL as the second most desired language programmers use, having 1,832 respondents
- Then C programming language is the third most desired by engineers. With 626 respondents.

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- The most current database is the MySQL with respondents of 2,919
- Next is the PostgreSQL with 2,064 respondents
- And thirdly is the SQLite database with 1,376

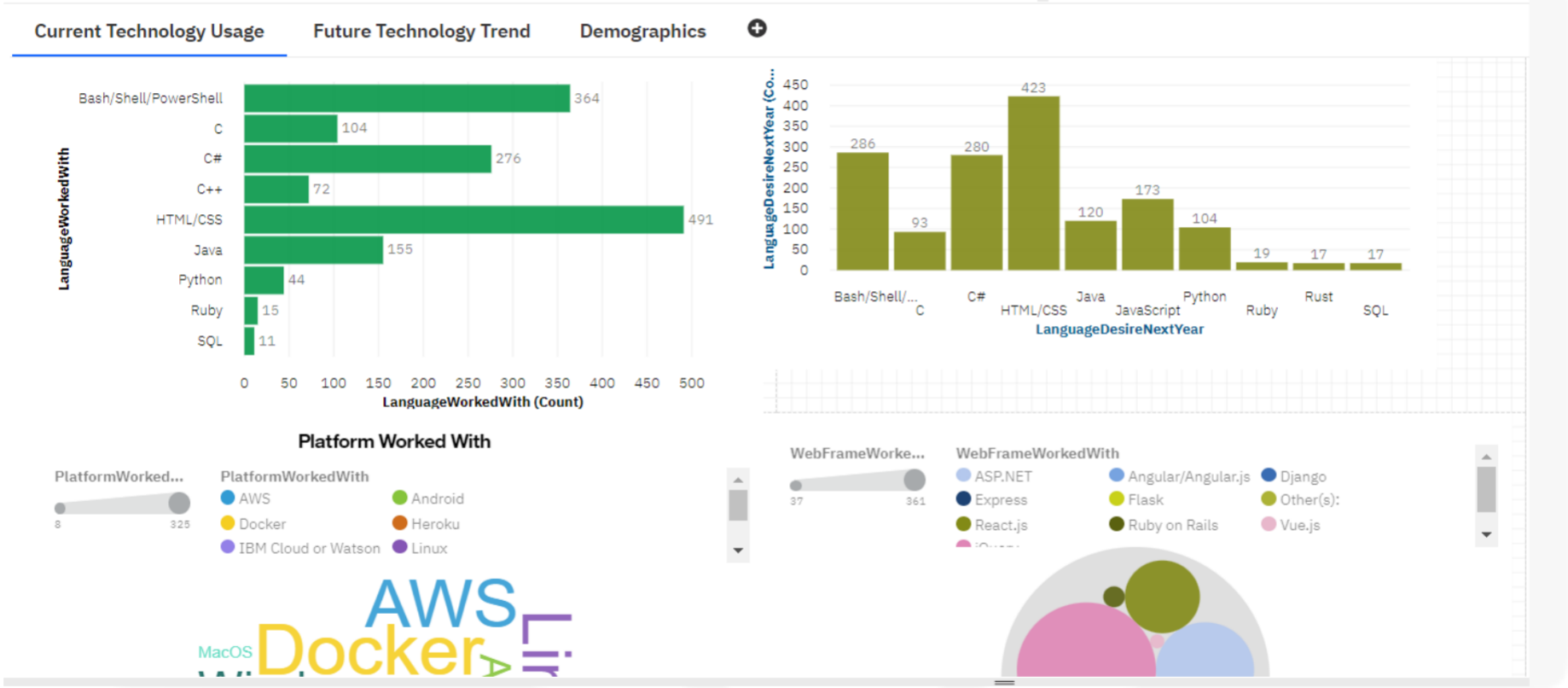
Implications

- But in the coming year engineers will be using PostgreSQL database as the most desired, having 4,328 respondents
- Followed by MongoDB database, with 3,649
- And the third most desired database in the coming year is the Redis database, with 3,331 respondents

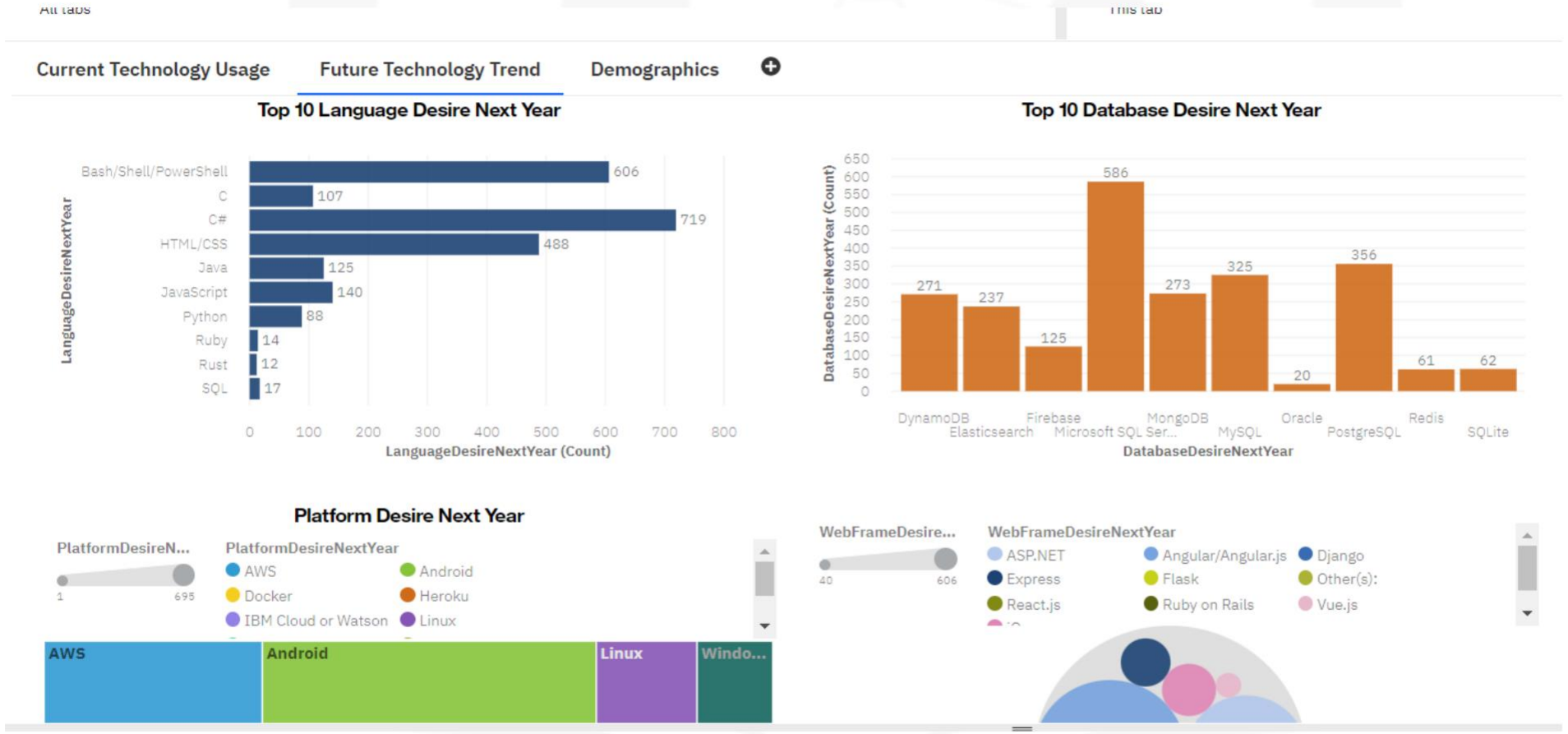
DASHBOARD

https://eu-gb.dataplatform.cloud.ibm.com/dashboards/64cca370-7e79-4c3a-bac3-3ccb639cefe2/view/7262d62120f131c340e8bde4079a2c0379347659babb8100d18d7b4909612297a83b1199c879190bde105030a5bd465eca

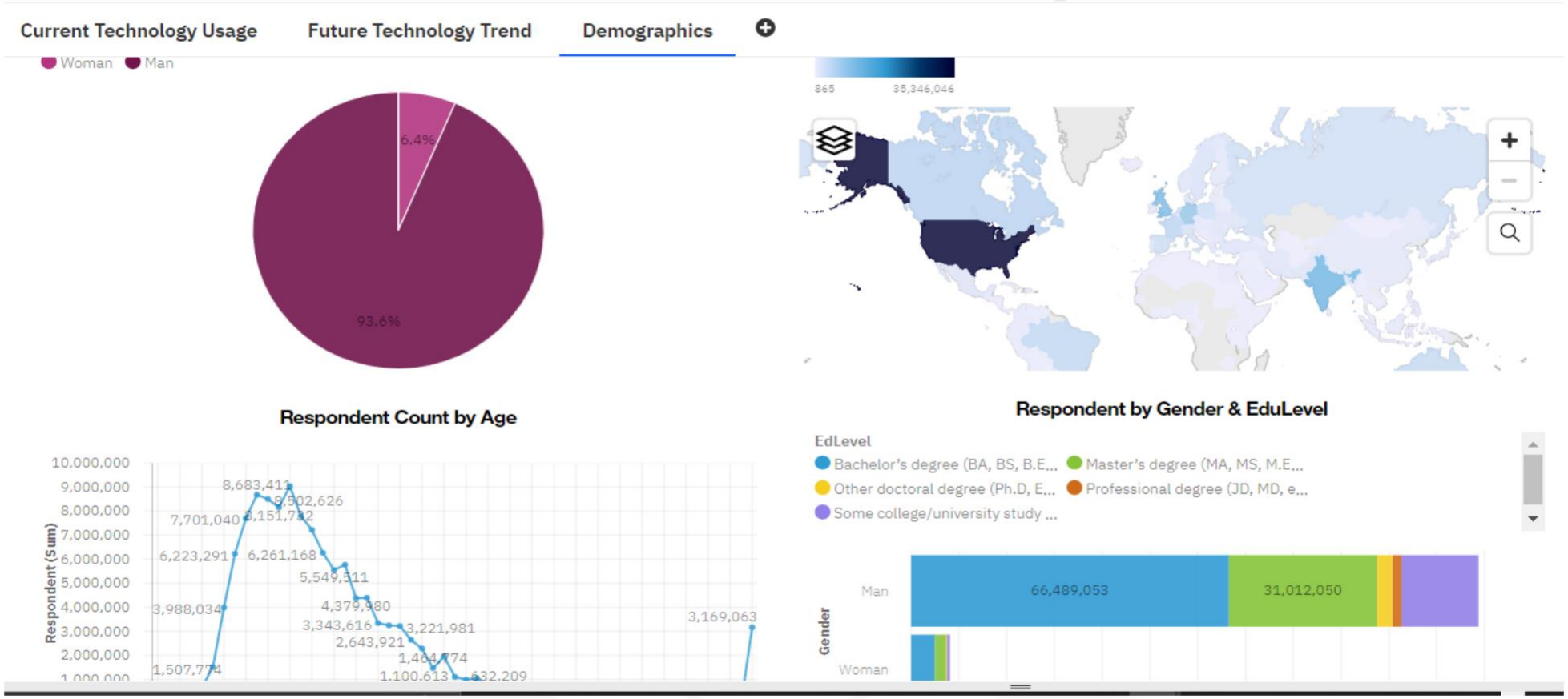
DASHBOARD TAB 1



DASHBOARD TAB 2



DASHBOARD TAB 3



DISCUSSION

- It was shown that younger people are interest in programming
- United States is the top when it comes to programming profession
- All programming professions are highly paid according to hierarchy

OVERALL FINDINGS & IMPLICATIONS

Findings

- The programming language with the highest salary is swift with $130,801
- The age range of the most responsive respondents are between 28-30years
- Most of the respondents are from United States

Implications

- The least paid programming language is PHP
- The least participated age range are 16-18, 56-58, 62-72years
- The least respondents countries are Tanzania and Ethiopia

CONCLUSION

- The top programming languages in demand are; C#, Java, Python, Ruby, SQL, C
- The top Databases in demand are; SQLite, DynamoDB, PostgreSQL, Redis
- The popular IDEs are; AWS, Linux, Andriod, Docker, Heroku
- Include any relevant additional charts, or tables that you may have created during the analysis phase.