Prof. Pranav Nerurkar

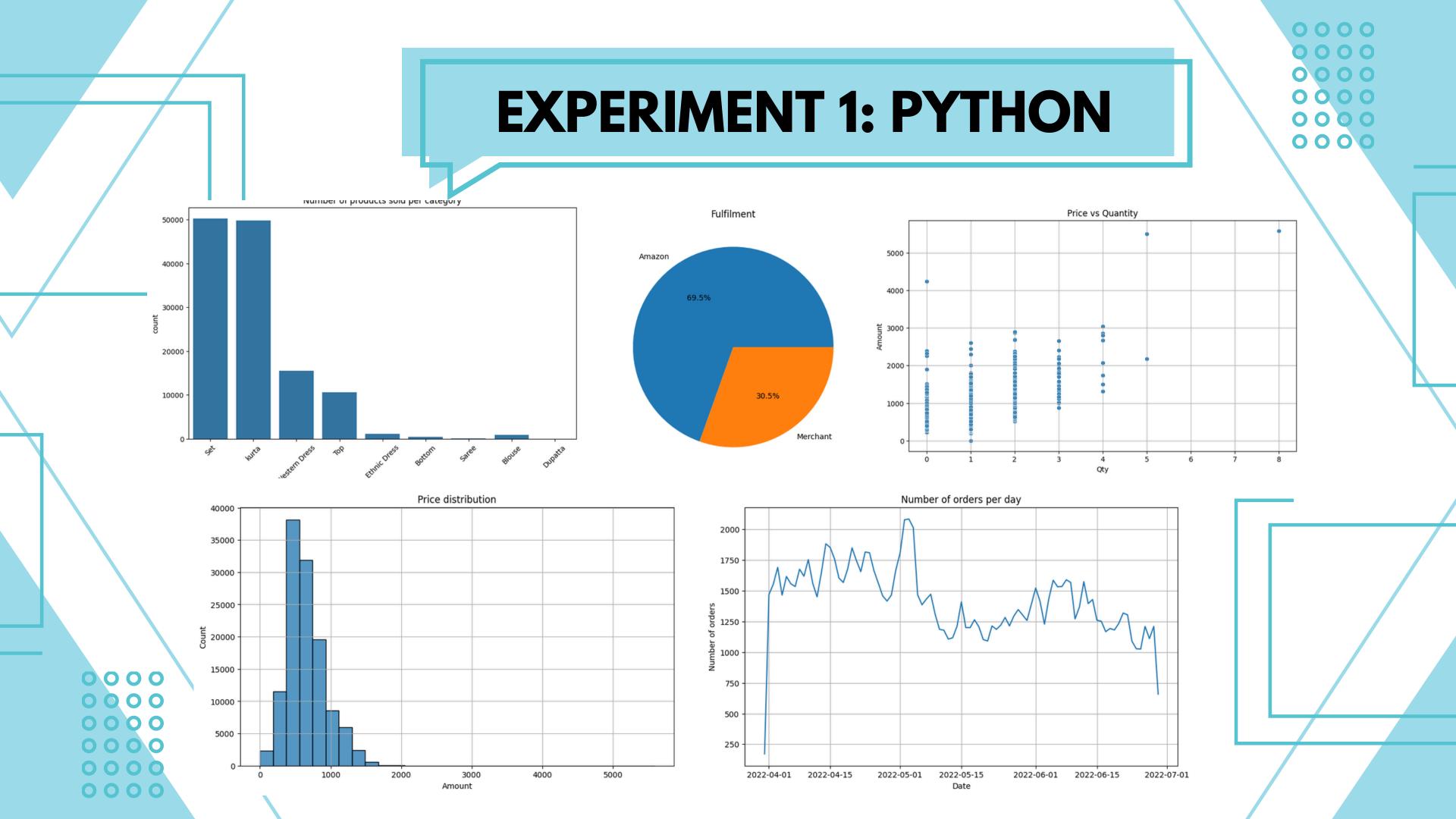


Lab Experiments

Hatim Sawai 202|300|08 BE COMPS B



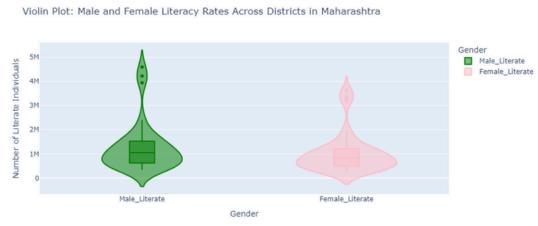


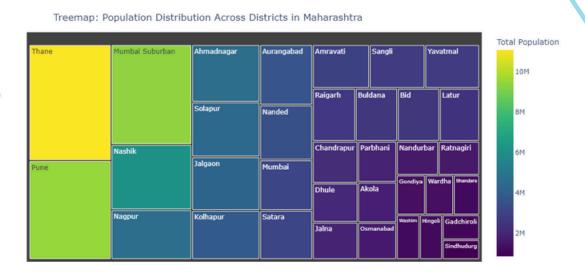


EXPERIMENT 2: PYTHON

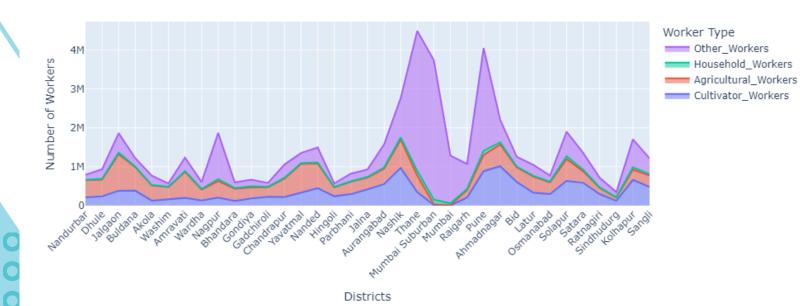




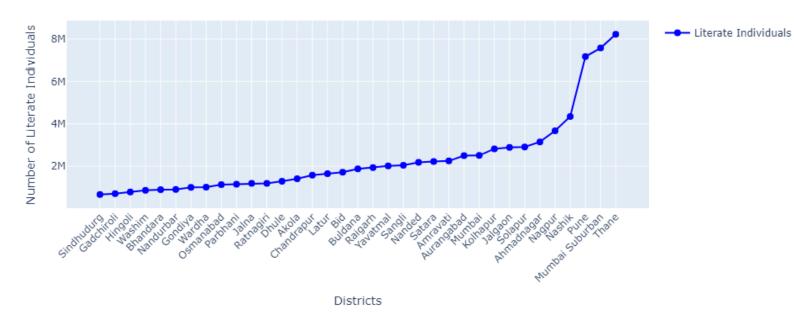




Area Plot: Distribution of Different Types of Workers Across Districts in Maharashtra

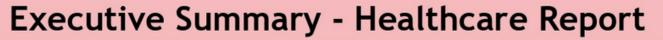


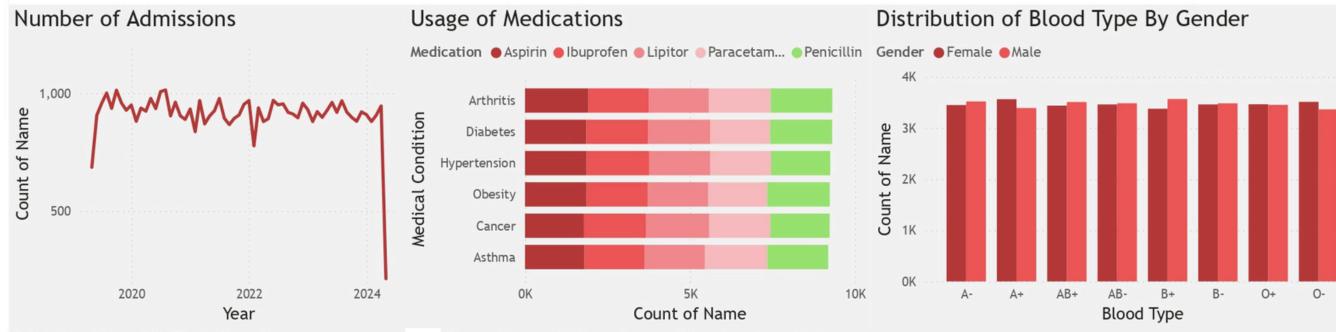
Line Plot: Literacy Rates Across Districts in Maharashtra

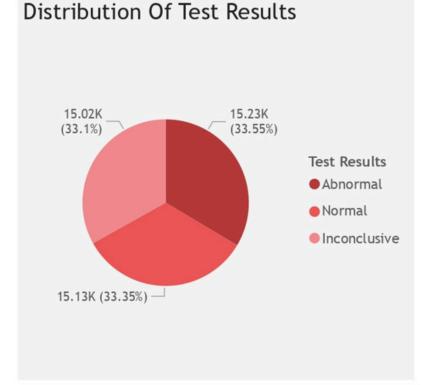


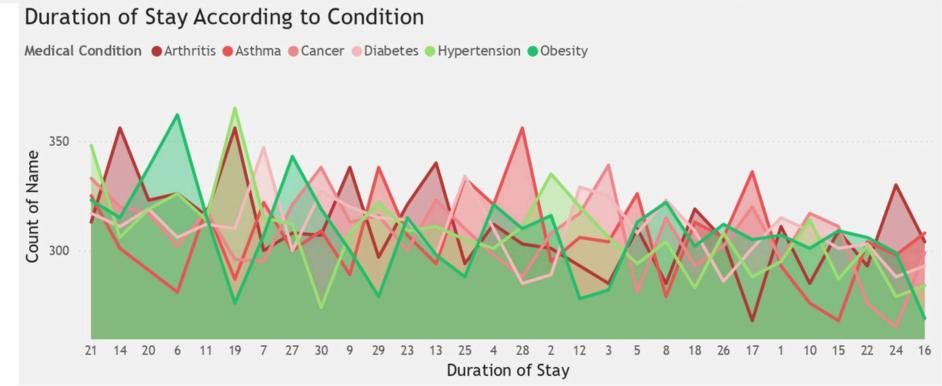
EXPERIMENT 3: POWER-BI











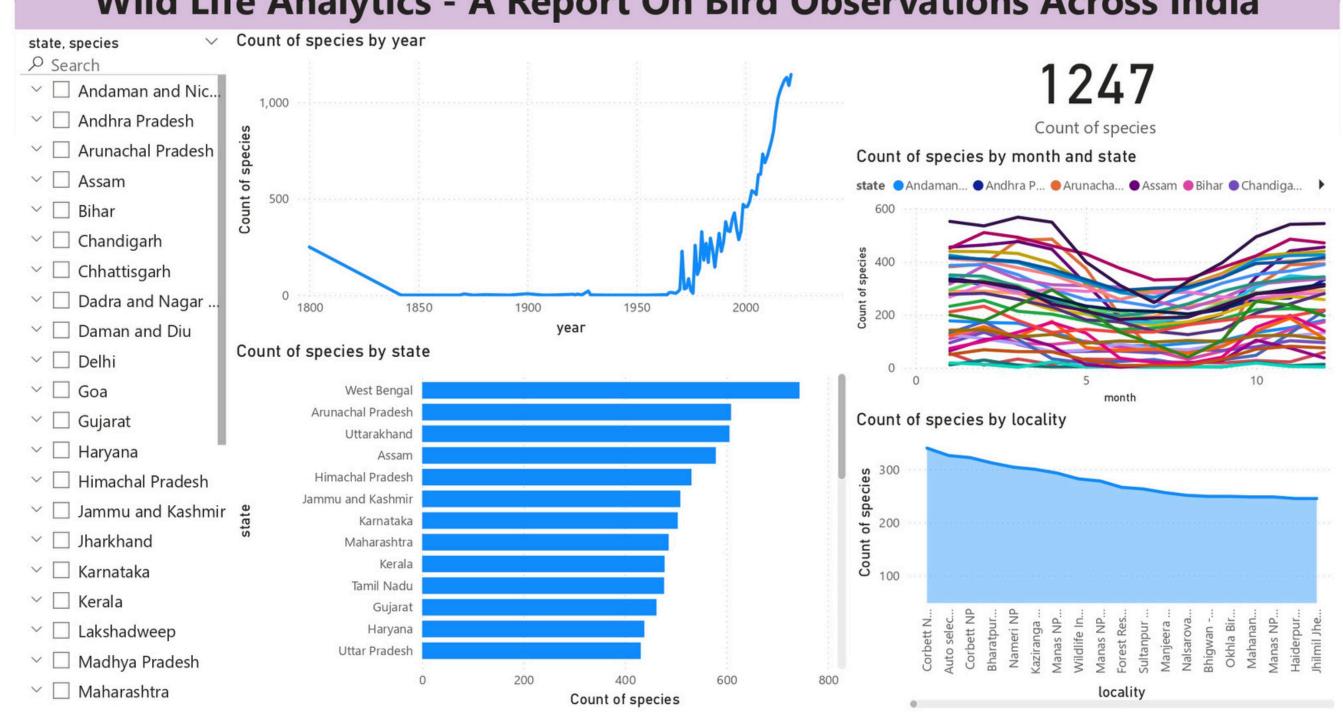


EXPERIMENT 4: R BASIC Number of Crimes by Neighborhood ID Number of Incidents by Month and Year Percentage of Crimes by Neighborhood ID

0000 **EXPERIMENT 5: R ADV** 0000 0000 Polynomial Regression of Price on Area Violin Plot of Price by Number of Bathrooms Boxplot of Price by Furnishing Status 3D Scatter Plot of Price vs Area and Bedrooms 5e+06 -0000 0000 10000 15000 0000 Area Number of Bathrooms Furnishing Status 0000

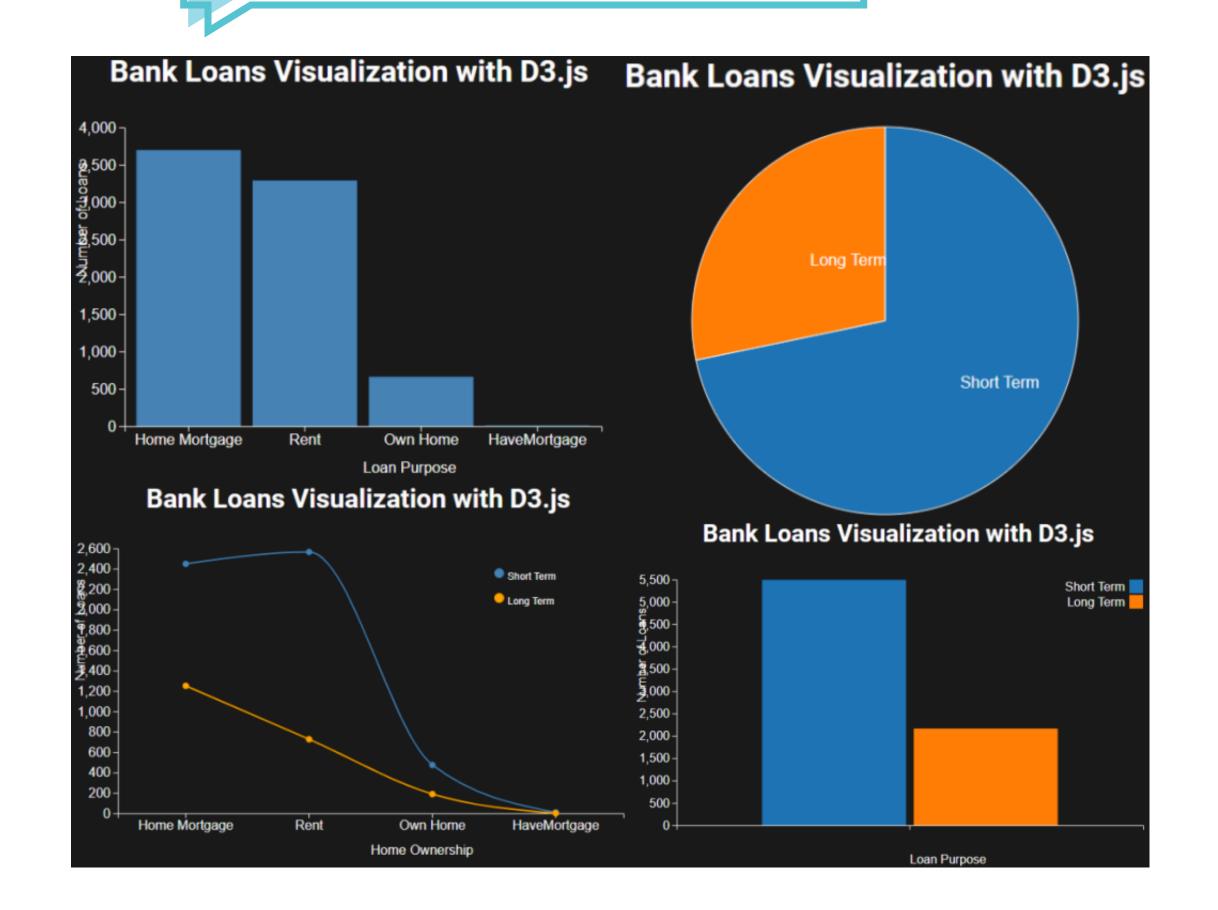
EXPERIMENT 6: POWER-BI







EXPERIMENT 7: D3.JS







EXPERIMENT 8: D3.JS

Weather Dashboard

Max Temperature: 48.1

Min Temperature: -8.5 Max Humidity:

Location with Most Rainfall: 0000

0000

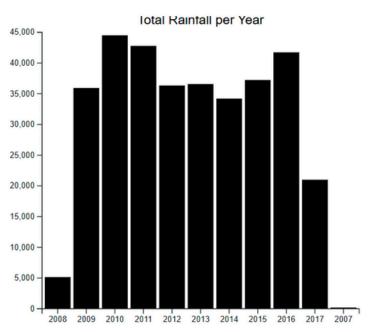
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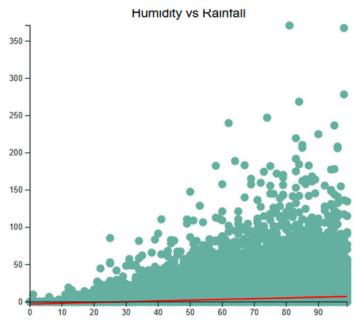
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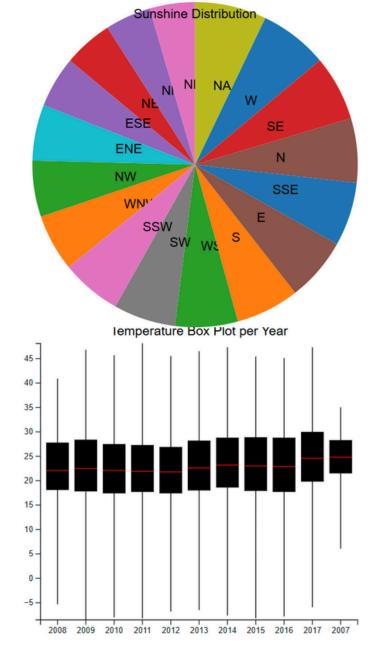
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Cairns (17157.20 mm)









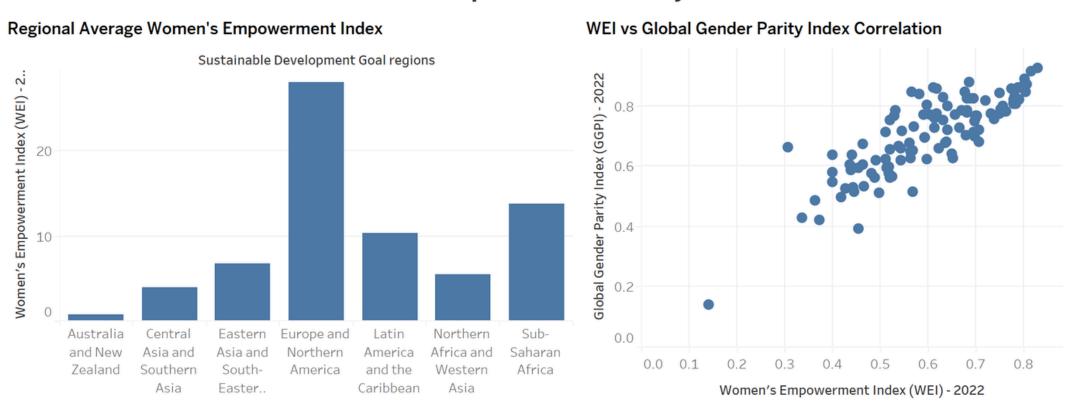
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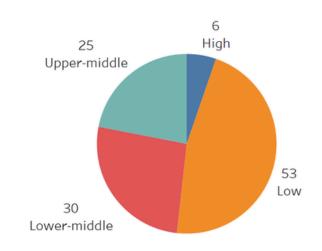
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EXPERIMENT 9: TABLEAU

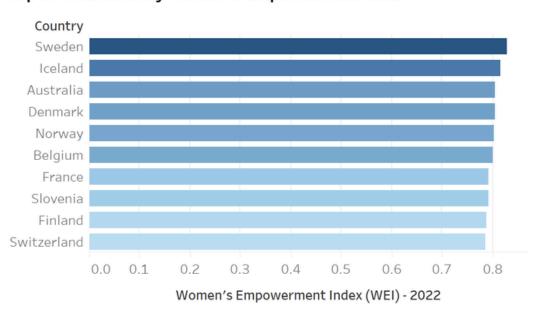
Women Empowerment Analytics



Distribution by Women's Empowerment Groups



Top 10 Countries by Women's Empowerment Index





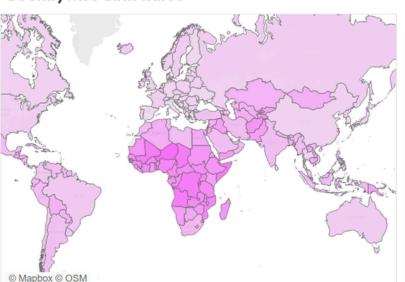
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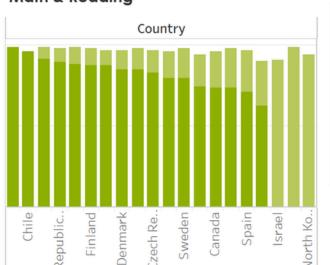
EXPERIMENT 10: TABLEAU

Global Education Statistics





Countries with Highest Proficiency in Math & Reading

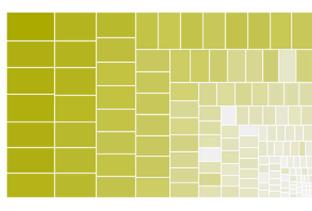


Pre-Primary Ages Males vs Females

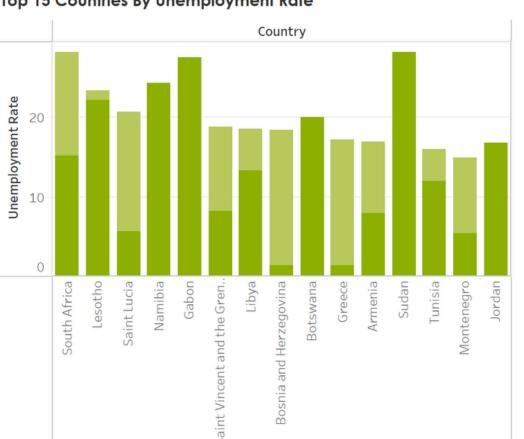
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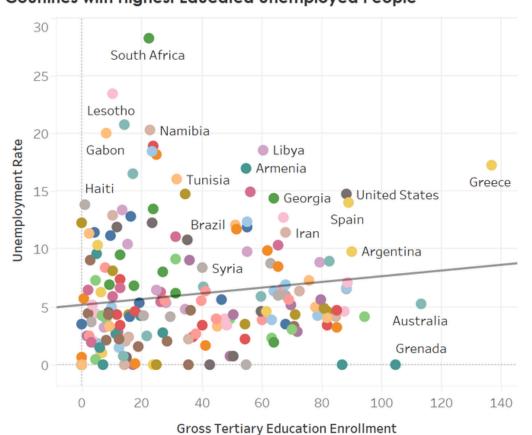
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Top 15 Countries By Unemployment Rate



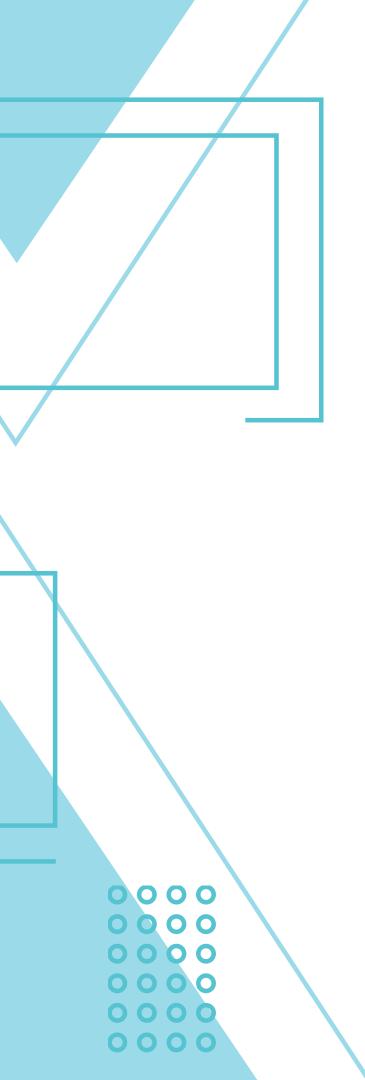
Countries with Highest Educated Unemployed People





Throughout this series of experiments, I explored various data visualization tools and techniques, including Python, R, Power BI, Tableau, and D3.js. Each tool provided unique strengths in creating both basic and advanced visualizations. Power BI & Tableau offer interactive dashboards and storytelling. Python and Renabled in-depth analysis with precise control over complex charts, while D3.js provided the flexibility to create fully customized, web-based visualizations. This comprehensive approach deepened my understanding of effective data visualization.





THANK YOU

By Hatim Sawai

