AKSHAYA ANANTAM

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- College Name: B V RAJU INSTITUTE OF TECHNOLOGY
- College State: Telangana
- Internship DOMAIN: DATA ANALYTICS
- Start date and End date: 12 JUNE to 23 JULY

PROJECT NAME/PROJECT TITLE

- DOCTOR VISIT ANALYSIS USING PYTHON.

AGENDA OF THE PROJECT:

- Analyzing the agenda of a doctor visit analysis project using Python will depend on the specific goals and requirements of the project.
- Gather the necessary data for analysis. This may include patient records, appointment schedules, medical histories, lab results, and any other relevant information.
- Clean and prepare the data for analysis. This step may involve removing duplicates, handling missing values, standardizing formats, and normalizing data if necessary.
- Perform initial data exploration to understand the characteristics and patterns within the dataset. Visualize the data using libraries such as matplotlib or seaborn to gain insights into patient demographics, appointment patterns, and other relevant factors.

PROJECT OVERVIEW:

- The Doctor Visit Analysis Project aims to analyze and gain insights from data related to doctor visits and patient information. The project involves using Python for data analysis, visualization, and potentially building predictive models. The overall goal is to extract meaningful information from the data that can help improve healthcare services, optimize appointment scheduling, and enhance patient care.
- However, here are some common goals that such a project may aim to achieve:
- Understand patient behavior patterns, such as appointment scheduling habits, frequency of visits, and adherence to treatment plans. Identify factors that influence patient behavior and engagement with healthcare services.
- Analyze appointment data to optimize scheduling processes and reduce wait times. Identify peak hours, evaluate appointment durations, and determine the optimal number of appointments per day or week.

END USERS OF THE PROJECT:

- Healthcare Administrators
- Healthcare Providers
- Medical Researchers
- Healthcare Quality Improvement Teams
- Healthcare Policy Makers
- Insurance Providers
- Patients and Patient Advocacy Groups

SOLUTION FOR THE PROBLEM:

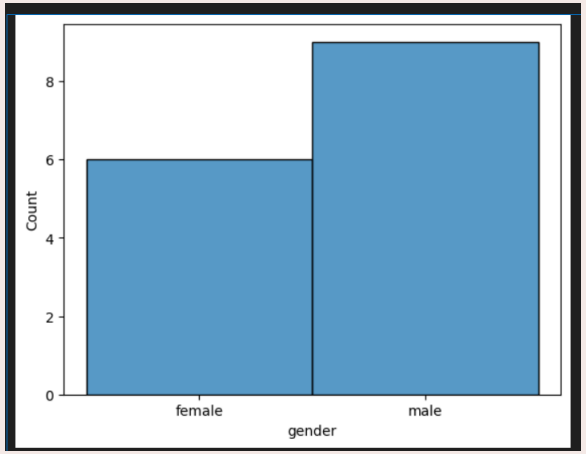
- I HAVE SEGREGATED THE PATIENTS BASED ON THEIR THE INCOME THAT THEY ARE

  EARNING PER ANNUM AND THE ILLNESS THAT THEY ARE HAVING.
- BASED UPON THE ILLNESS AND SEVERITY THE VISITS TO THE HOSPITAL DEPENDS.
- IF THE INCOME IS GOOD ,THEN WHATEVER THE PROBLEM HE IS FACING WILL BE TREATED EVEN MORE RAPID.
- IF THE INCOME IS MORE ,THEN THE PATIENT VISITING TO THE HOSPITAL IS MORE.
- IF THE INCOME IS LESS,THEN THE PATIENT VISITING TO THE HOSPITAL IS LESS.

CUSTOMIZATION OF THE PROJECT:

- I Have customized my project based on the idea that is having in my mind.
- I have made sure that patients income is segregated that is maximum, minimum, average.
- Data visualizations are done based on that segregation.
- Also collected the visiting patients list and illness that they are having.
- Based on these two factors I have customized the visualizations and their various types which made my project unique in its own way.
- Data visualizations are created in a creative way and according to the outputs that we require.

MODELLING: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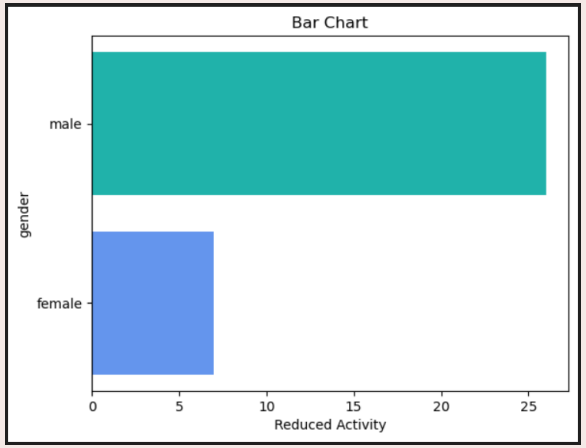
male
gender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female
gender
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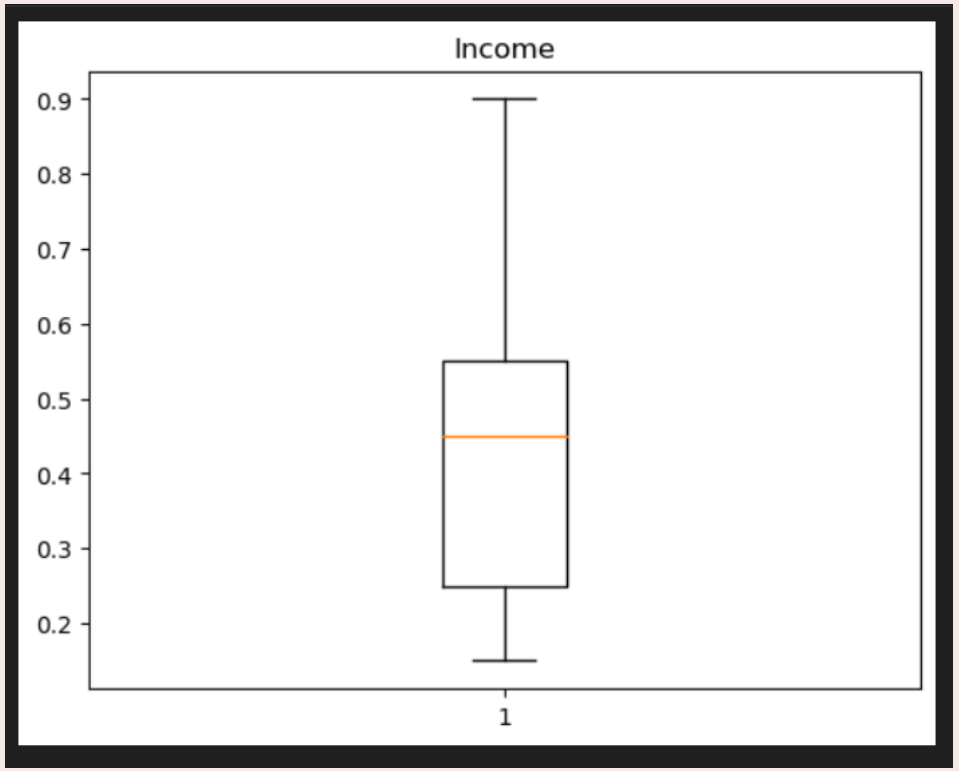
15
20
25
Reduced Activity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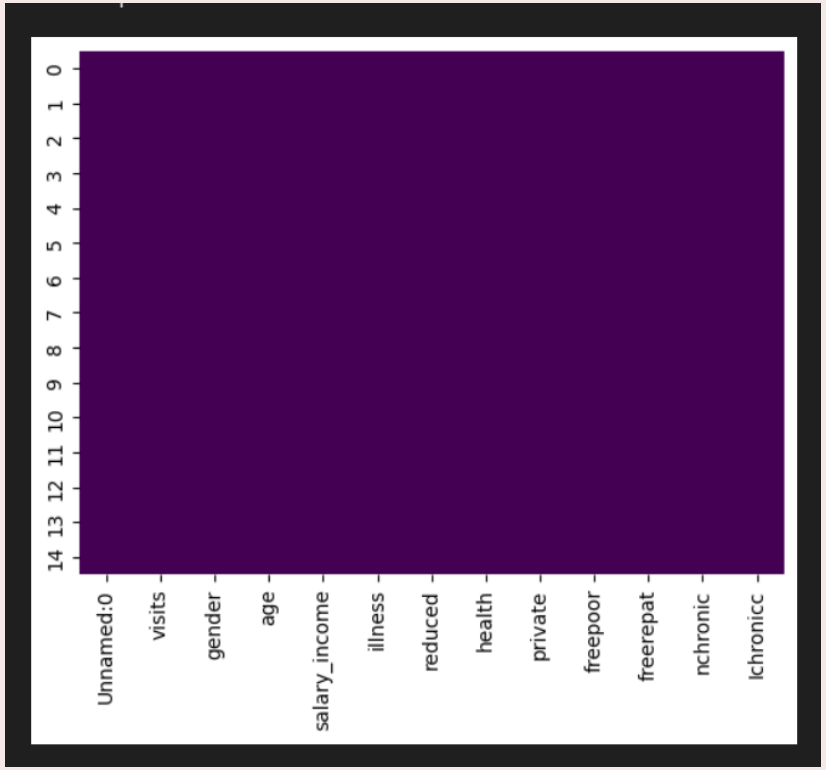
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6
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8
9
10
11
12
13
14
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gender
age
salary_income
illness
reduced
health
private
freepoor
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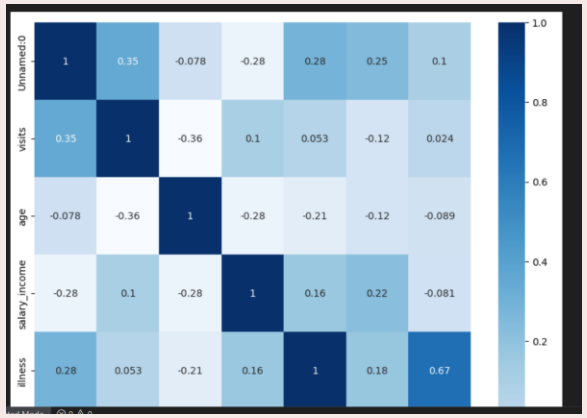
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salary_income
illness
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0.28
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1
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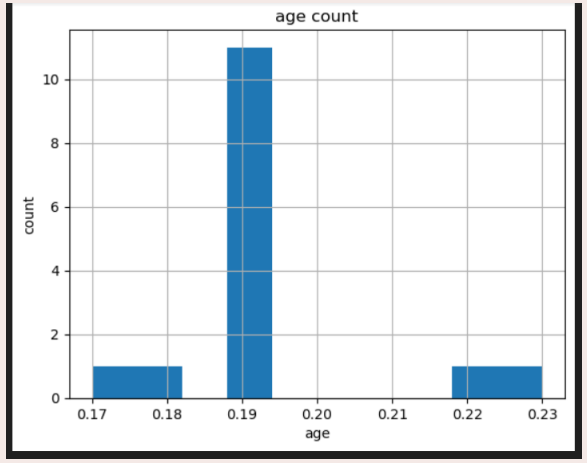
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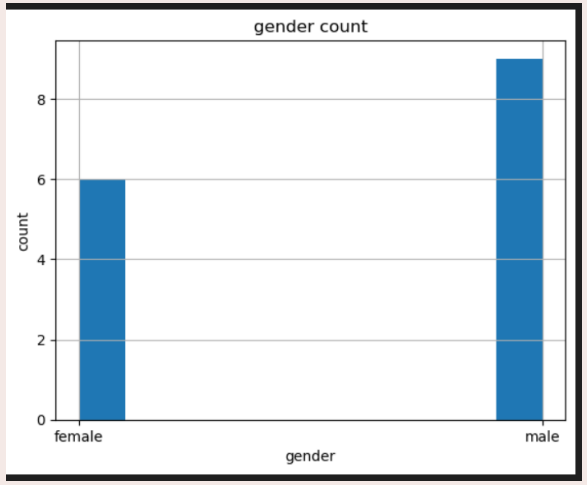
0.22
0.23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count
gender
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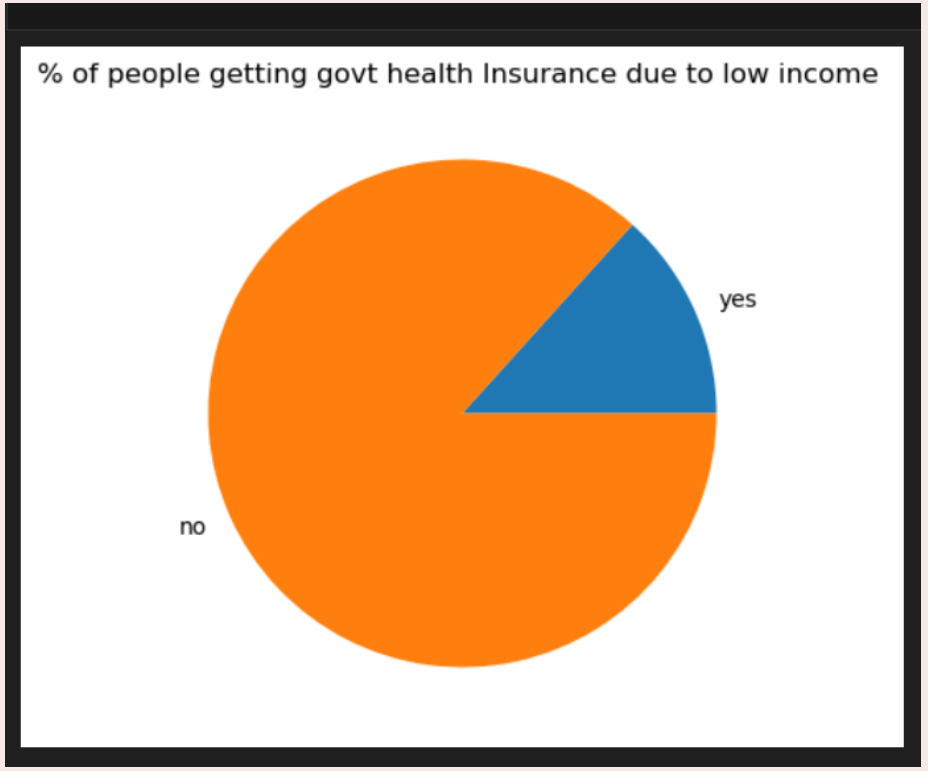
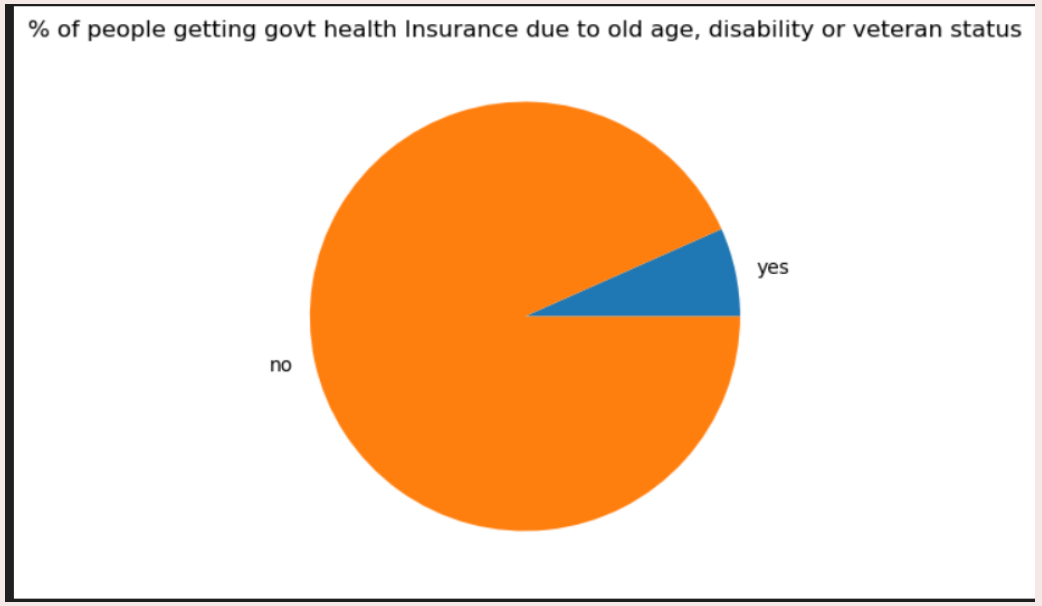
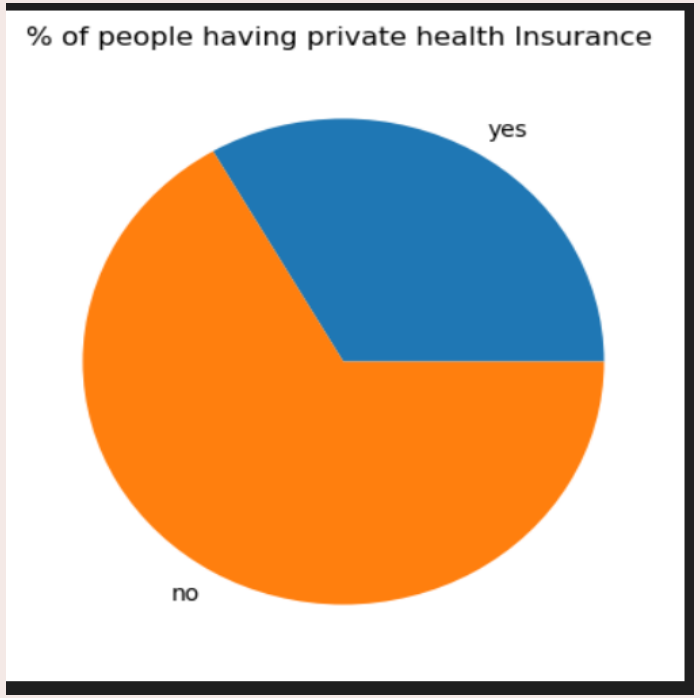
2
4
6
8
female
male

MODELLING:


% of people getting govt health Insurance due to low income
yes
no


% of people getting govt health Insurance due to old age, disability or veteran status
yes
no


% of people having private health Insurance
yes
no

RESULTS:

- By analyzing data related to doctor visits, you can gain a better understanding of patient demographics, including age, gender, geographic location, and socioeconomic factors. This information can help identify specific patient populations or segments that may require targeted healthcare interventions or services.
- Analyzing the diagnoses recorded during doctor visits can reveal patterns and trends in various medical conditions. This information can provide insights into prevalent diseases, emerging health issues, or specific conditions that require attention. It can also help healthcare providers allocate resources effectively and plan preventive measures.
- By analyzing the outcomes and follow-up data associated with different treatment approaches, you can assess the effectiveness of specific interventions or therapies. This can help identify best practices, improve treatment protocols, and enhance patient outcomes.

LINKS:

- http://localhost:8889/notebooks/Doctor_Visit_Analysis.ipynb
- https://rstudio-pubs-static.s3.amazonaws.com/42823_9f9621214fd846c2b7f961f56a367ddf.html
- https://towardsdatascience.com/how-i-used-python-and-r-to-analyze-and-predict-medical-appointment-show-ups-cd290cd3fad0