

KGiSL Institute of Technology

NAAN MUDHALVAN

Project title :

Public Health Awareness

TEAM MEMBERS:

* Shree S M
* Hentry Abel I
* Ajay Raahul
* Hariprasath

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PROJECT DESCRIPTION :

**PHASE 4 : Development On The Public Health Awareness DataSet**

OBJECTIVE :

STEPS :

IN GOOGLE COLAB NOTEBOOK:

* Mount the google drive
* Load the DataSet to the Google ColabNotebook

DESCRIPTIVE ANALYSIS :

* Frequency
* Proposition
* Summary Statistics & Reports
* Corelation
* Graph Representation

DESCRIPTIVE ANALYSIS :

FREQUENCY:

code :

# Frequency of treatement :

response\_counts = id['treatment'].value\_counts()

print(response\_counts)

output:



PROPOSITION:

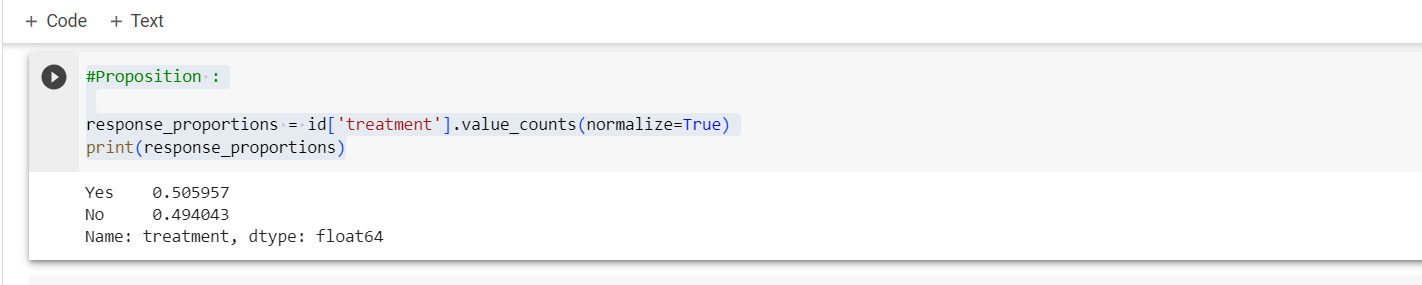
code:

#Proposition :

response\_proportions = id['treatment'].value\_counts(normalize=True)

print(response\_proportions)

output:



SUMMARY STATISTICS :

code :

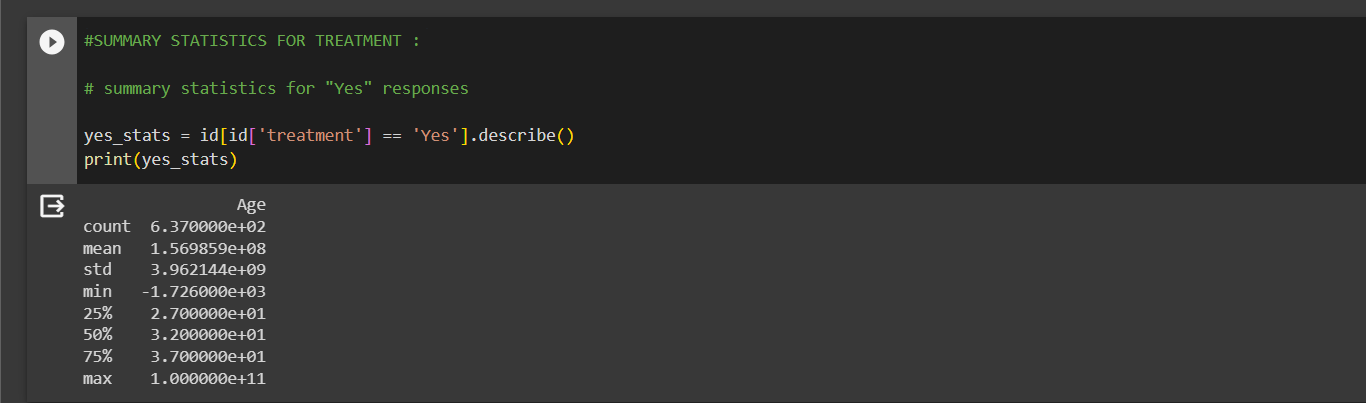
#SUMMARY STATISTICS FOR TREATMENT :

# summary statistics for "Yes" responses

yes\_stats = id[id['treatment'] == 'Yes'].describe()

print(yes\_stats)

output :

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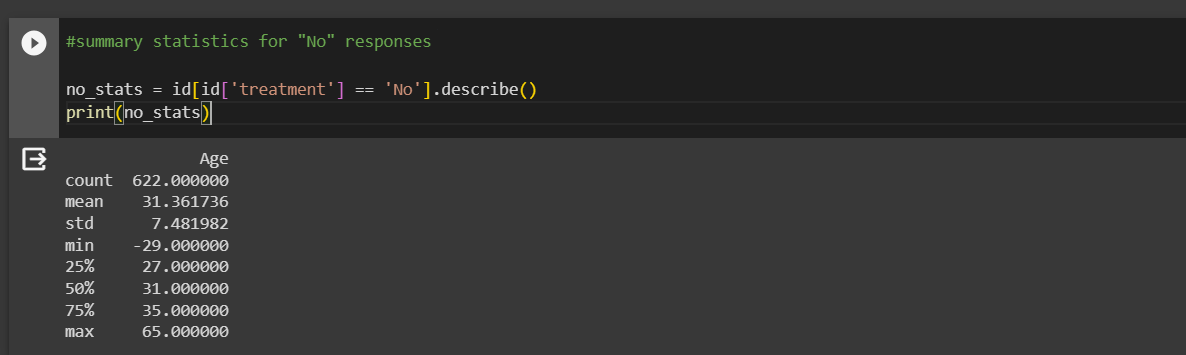
code:

#summary statistics for "No" responses

no\_stats = id[id['treatment'] == 'No'].describe()

print(no\_stats)

output:



GRAPH REPRESENTATION :

code:

#BAR GRAPH :

import matplotlib.pyplot as plt

plt.bar(response\_counts.index,response\_counts.values,color='skyblue',edgecolor='k')

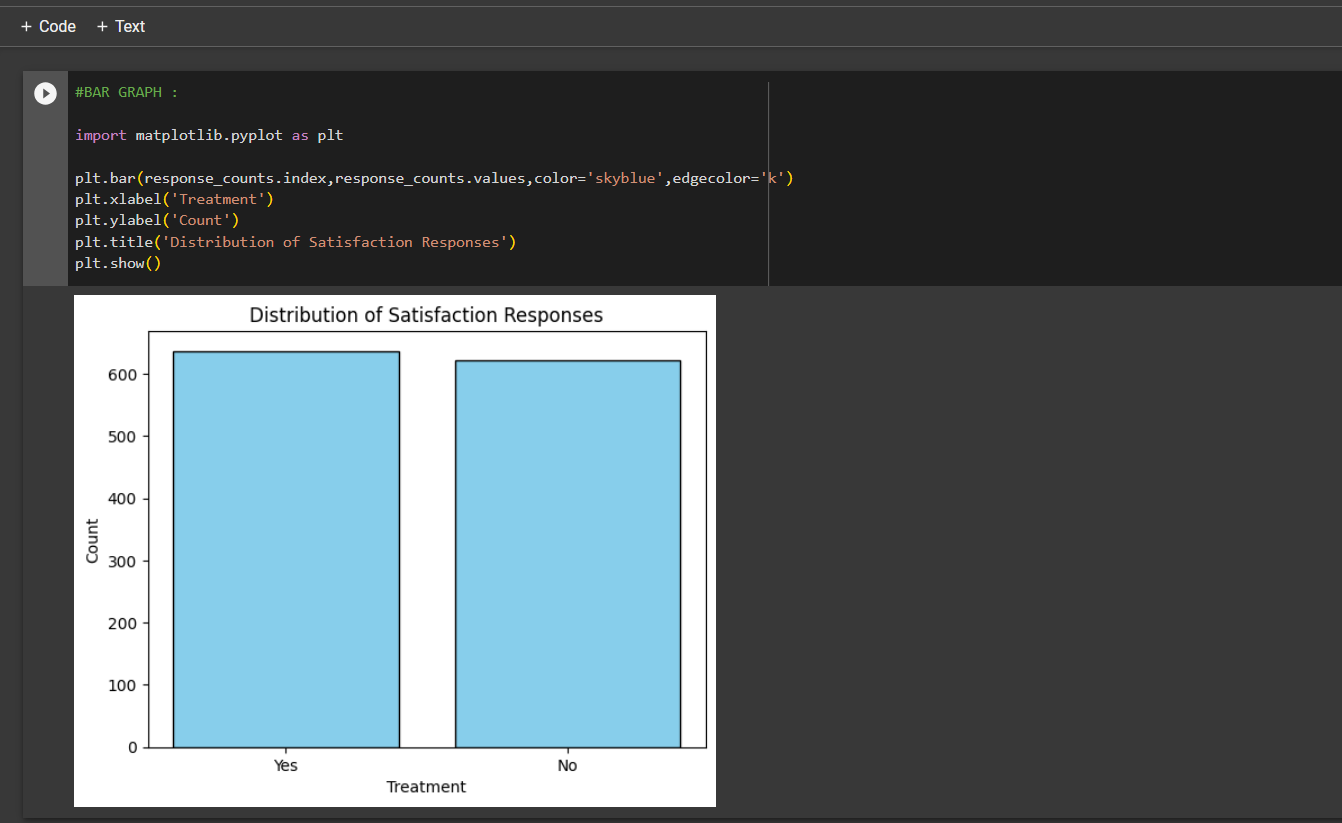
plt.xlabel('Treatment')

plt.ylabel('Count')

plt.title('Distribution of Satisfaction Responses')

plt.show()

output :



code :

#HISTOGRAM FOR AGE DISTRIBUTION :

data=id.Age

plt.hist(data, bins=5, edgecolor='k',color='pink')

plt.xlabel('Values')

plt.ylabel('Frequency')

plt.title('Histogram for Age  Distribution')

plt.show()

output :



CORELATION :

code:

#CORELATION :

import pandas as pd

import matplotlib.pyplot as plt

import seaborn as sns

# Correlation heatmap

correlation\_matrix = id .corr()

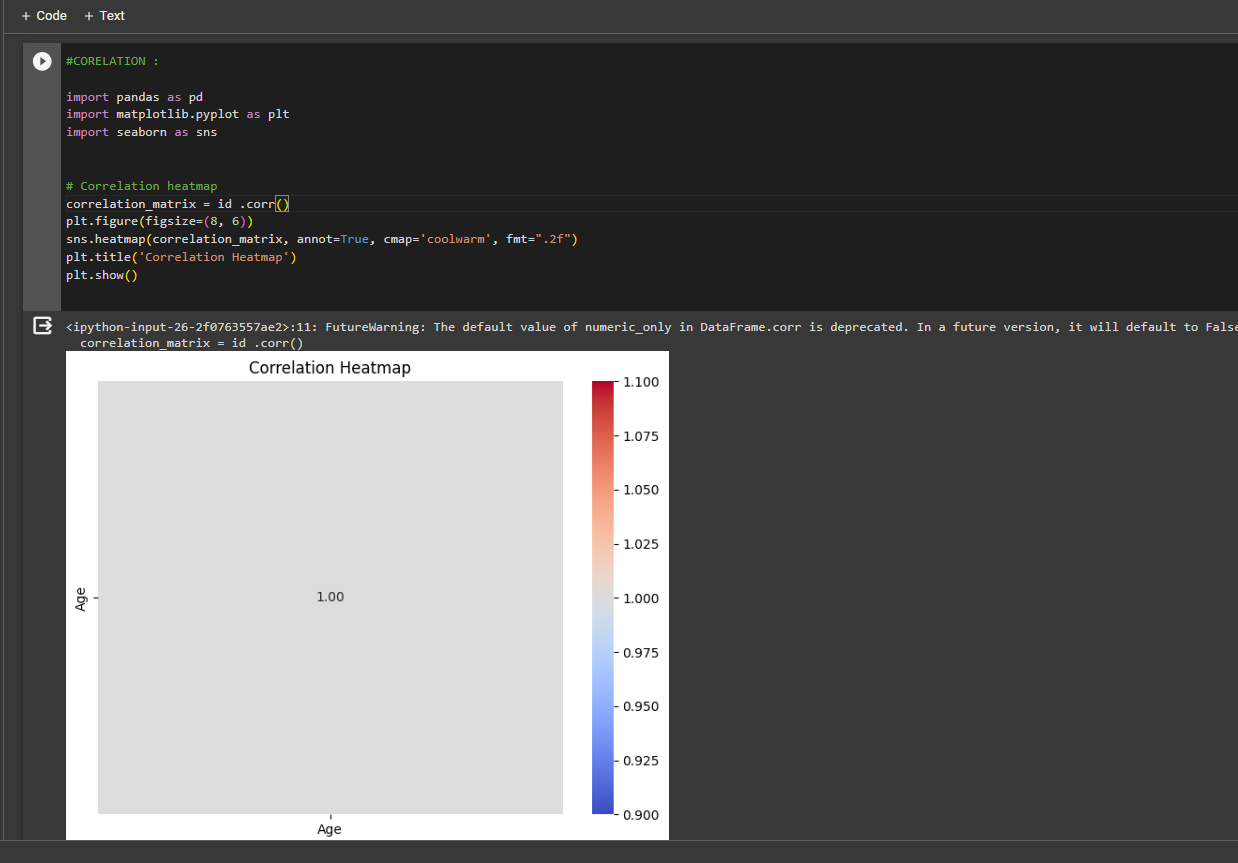
plt.figure(figsize=(8, 6))

sns.heatmap(correlation\_matrix, annot=True, cmap='coolwarm', fmt=".2f")

plt.title('Correlation Heatmap')

plt.show()

output :



SUMMARY REPORTS:

code:

#SUMMARY REPORTS FOR TREATMENT MADE :

# Calculate key statistics

total\_responses = len(id)

yes\_responses = (id['treatment'] == 'Yes').sum()

no\_responses = total\_responses - yes\_responses

yes\_percentage = (yes\_responses / total\_responses) \* 100

no\_percentage = 100 - yes\_percentage

# Generate a summary report

summary\_report = f"""

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Summary Report

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Total Responses: {total\_responses}

Yes Responses: {yes\_responses} ({yes\_percentage:.2f}%)

No Responses: {no\_responses} ({no\_percentage:.2f}%)

Distribution of Satisfaction Responses:

See the bar chart below.

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"""

print(summary\_report)

output :

