

Beliefs About High Gods	Yes	No	Total
High god associated with weather	28 (61.7%)	18 (38.3%)	46 (100%)
High god harms food supply with weather	12 (37.5%)	20 (62.5%)	32 (100%)
High god helps food supply with weather	18 (48.6%)	19 (51.4%)	37 (100%)
High god punitive with weather	13 (34.2%)	25 (65.8%)	38 (100%)

Visualization Basis Code from Previous Discussion Post

```
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
from docx import Document

# Path to your document
doc_path =
r"C:\Users\jamar\Downloads\GCU_DSC_510_Discussion_Post_NFL_Statistics_Example.docx"
# Load the document
doc = Document(doc_path)

# Initialize a list to store table data
table_data = []

# Extract data from the document
for table in doc.tables:
    for row in table.rows:
        row_data = [cell.text.strip() for cell in row.cells] # Strip whitespace
        table_data.append(row_data)
```

```

# Convert to DataFrame (assuming first row is the header)
if table_data: # Check if there is any table data
    df = pd.DataFrame(table_data[1:], columns=table_data[0])
else:
    df = pd.DataFrame() # Create an empty DataFrame

# Display the DataFrame
print("\nDataFrame:")
print(df)

# Check if the DataFrame is empty
if df.empty:
    print("No data available to plot.")
else:
    # Extracting relevant statistics from the 'Statistic' column
    # This assumes you have mean, variance, and standard
    deviation listed in your DataFrame
    stats_data = {
        'Statistic': ['Mean', 'Variance', 'Standard Deviation'],
        'Values': [101.29, 430.05, 20.74] # Sample values;
        replace with actual data extraction if necessary
    }
    stats_df = pd.DataFrame(stats_data)

    # Create a bar plot for mean, variance, and standard
    deviation
    plt.figure(figsize=(10, 6))
    sns.barplot(x='Values', y='Statistic', data=stats_df,
        palette="Set2")
    plt.title('Mean, Variance, and Standard Deviation of NFL
    Statistics', fontsize=16)
    plt.xlabel('Value', fontsize=12)
    plt.ylabel('Statistic', fontsize=12)
    plt.show()

```

Higher Gods in Weather Visualization Code Create from Previous Code

```
import pandas as pd
import matplotlib.pyplot as plt

# Data extraction from provided information
data = {
    'Belief': [
        'High god associated with weather',
        'High god harms food supply with weather',
        'High god helps food supply with weather',
        'High god punitive with weather'
    ],
    'Yes': [28, 12, 18, 13],
    'No': [18, 20, 19, 25],
    'Total': [46, 32, 37, 38]
}

# Create a DataFrame
df = pd.DataFrame(data)

# Plotting
plt.figure(figsize=(10, 6))

# Plot Yes responses
plt.plot(df['Belief'], df['Yes'], marker='o', label='Yes',
         linestyle='-', color='green')
# Plot No responses
plt.plot(df['Belief'], df['No'], marker='o', label='No',
         linestyle='-', color='red')
# Plot Total responses
plt.plot(df['Belief'], df['Total'], marker='o', label='Total',
         linestyle='-', color='blue')

# Customizing the plot
```

```
plt.title('Beliefs About High Gods: Yes, No, and Total  
Responses')  
plt.xlabel('Belief')  
plt.ylabel('Number of Responses')  
plt.xticks(rotation=45)  
plt.legend()  
plt.grid()  
plt.tight_layout()  
plt.show()
```