Quiz 2

import numpy as np import matplotlib.pyplot as plt

Array

```
\begin{array}{l} {\rm data1} = [85,\,62,\,78,\,64,\,25,\,12,\,74,\,96,\,63,\,45,\,78,\,20,\,5,\,30,\,45,\,78,\,45,\,96,\,65,\\ 45,\,12,\,74,\,78,\,23,\,8] \end{array}
```

Statistical Summary

```
print("Quiz 2 - Statistical Summary Overview:")
max = np.max(data1) print("Max:{0:d}".format(max))
min = np.min(data1) print("Min:{0:d}".format(min))
mean = np.mean(data1) print("Mean:{0:8.4f}".format(mean))
variance = np.var(data1) print("Variance: {0:8.4f}".format(variance))
standarddev = np.std(data1) print("STD: {0:8.4f}".format(standarddev))
median = np.median(data1) print("Median: {0:8.4f}".format(median))
```

Data visualizations

```
hist1, edges1 = np.histogram(data1) plt.bar(edges1[:-1], hist1, width = edges1[1:] - edges1[:-1], edgecolor = 'k') plt.title("Data Array") plt.show()
```

References:

```
""" - Grok 2 """
```