Statistical Report

Data Summary and Detailed Analysis:

time:
Range: 0.0 , 6.283185307179586
Mean: 3.14
Median: 3.14
Standard Deviation: 1.84
25th Percentile: 1.57
75th Percentile: 4.71
Data Count: 100
Approximately 50% of the data falls within the range of 1.5707963267948968 to 4.71238898038469.

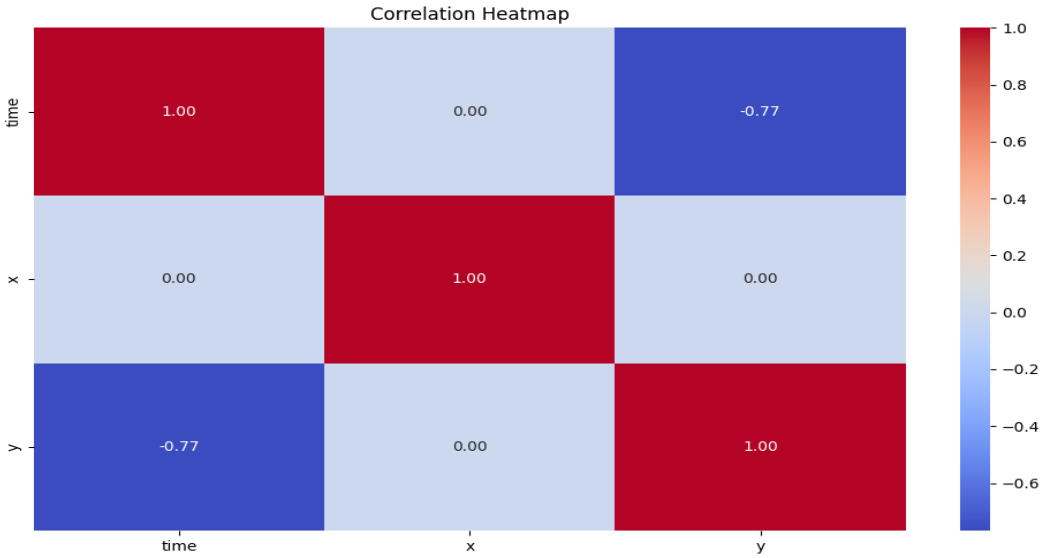
x:
Range: -0.9994965423831852 , 1.0
Mean: 0.01
Median: 0.02
Standard Deviation: 0.71
25th Percentile: -0.70
75th Percentile: 0.72
Data Count: 100
Approximately 50% of the data falls within the range of -0.7014748877063213 to 0.7237340381050701.

y:
Range: -0.9998741276738752 , 0.9998741276738752
Mean: -0.00
Median: -0.00
Standard Deviation: 0.71
25th Percentile: -0.70
75th Percentile: 0.70
Data Count: 100
Approximately 50% of the data falls within the range of -0.6957328014562998 to 0.6957328014562997.

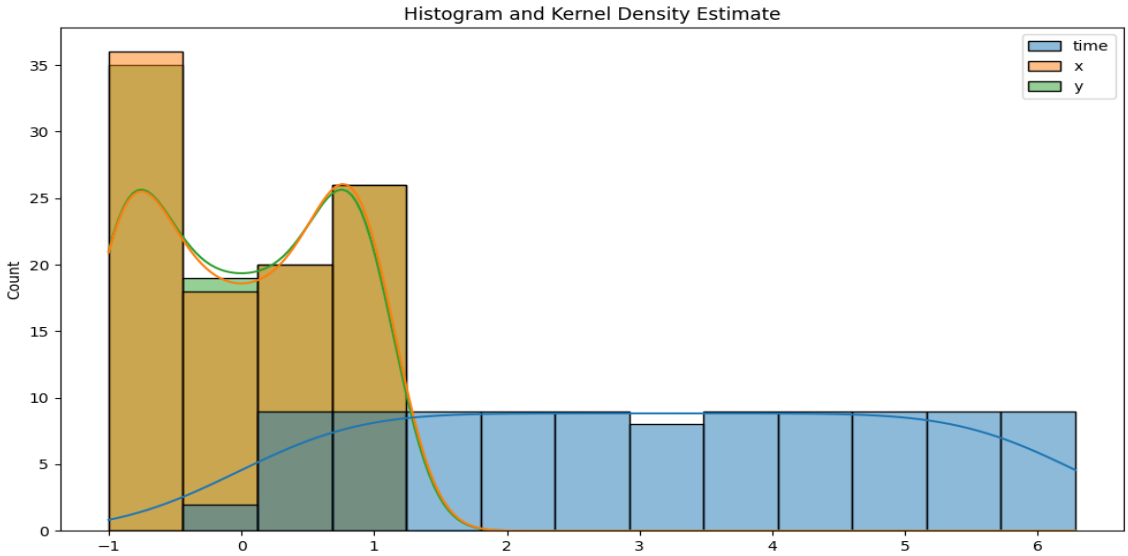
Analysis of the Charts:

The charts below illustrate various statistical aspects of the dataset:
- **Correlation Heatmap**: Visualizes the correlation coefficients between pairs of variables, helping to identify which variables have strong linear relationships.
- **Histogram and Kernel Density Estimate**: Provides insights into the distribution of data values and their densities, helping to understand the frequency of data points within different ranges.
- **Pairwise Distribution Plot**: Shows relationships and distributions between all pairs of variables, useful for detecting patterns and correlations across the dataset.
- **Z-Distribution Plots**: Illustrates the distribution of each variable, normalized to standard units. Useful for understanding the standard deviations and overall distribution patterns.
- **Boxplots**: Displays the distribution of data and identifies outliers for each variable.

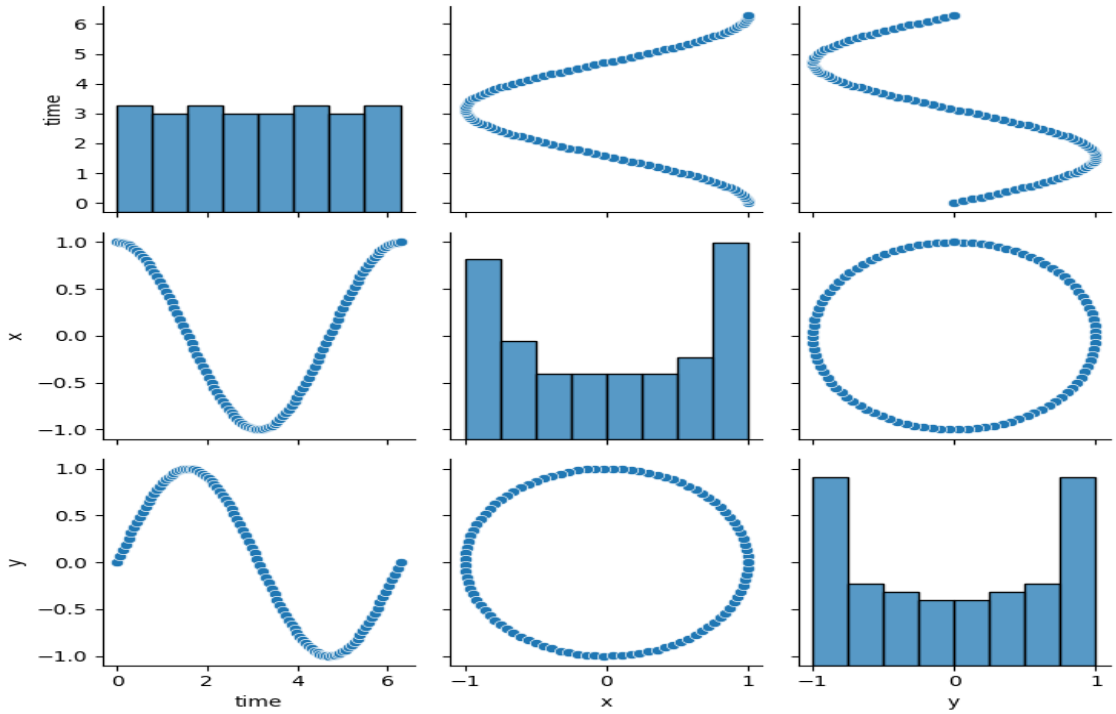
Correlation Heatmap:



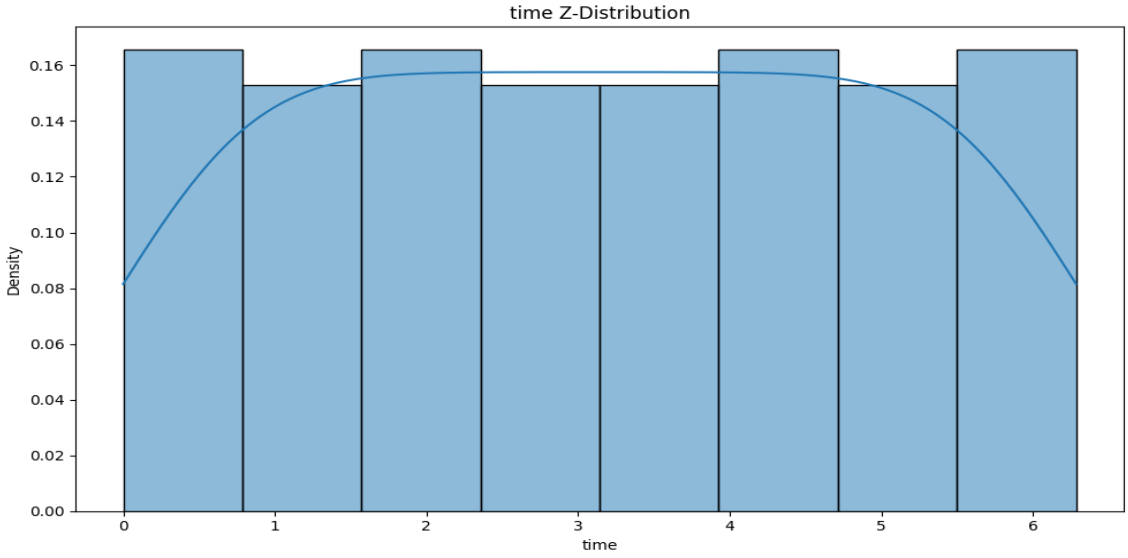
Histogram and Kernel Density Estimate:



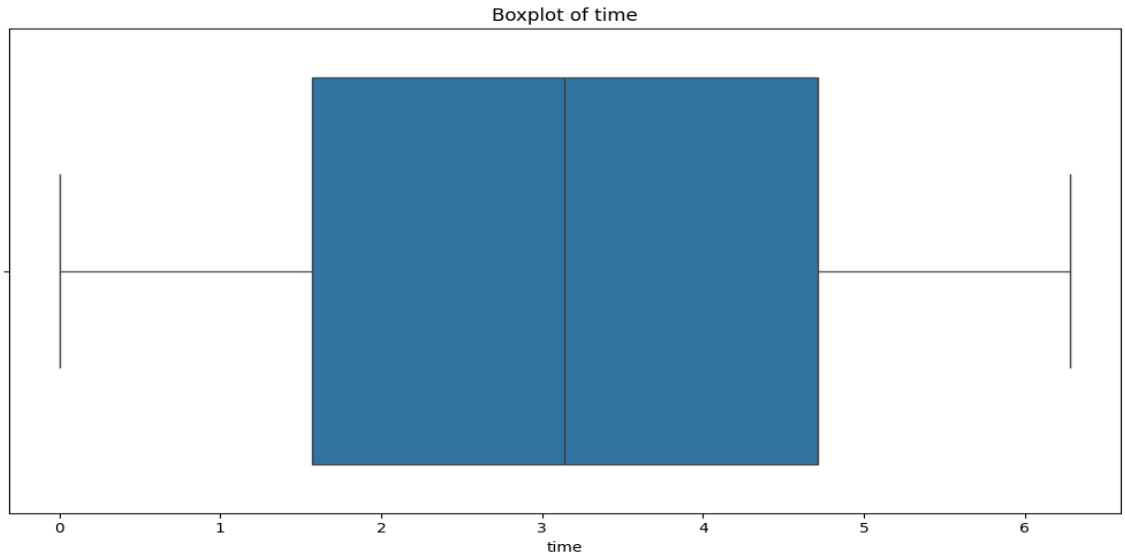
Pairwise Distribution Plot:



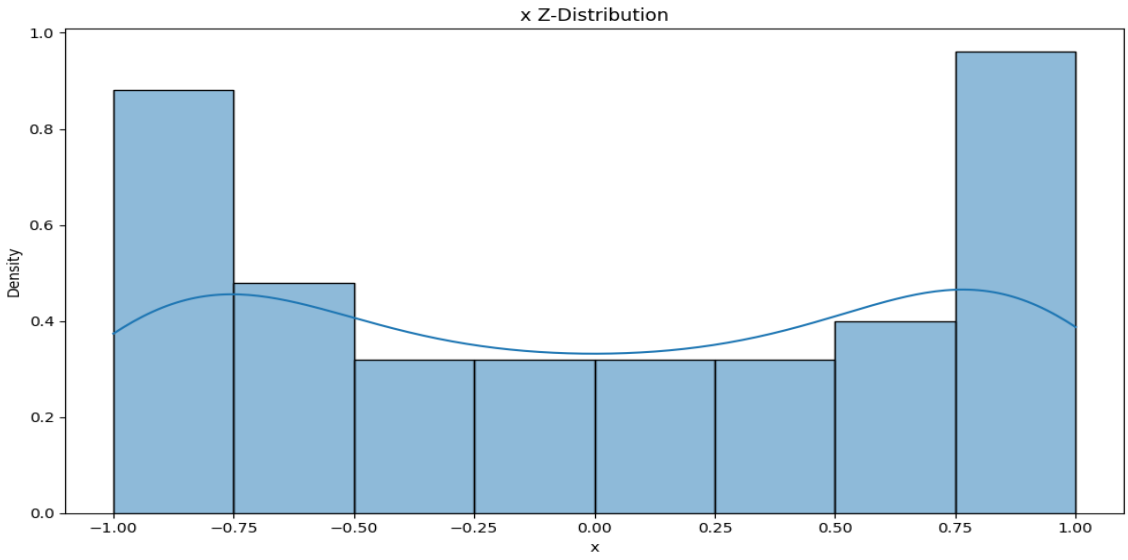
Z-Distribution for time:



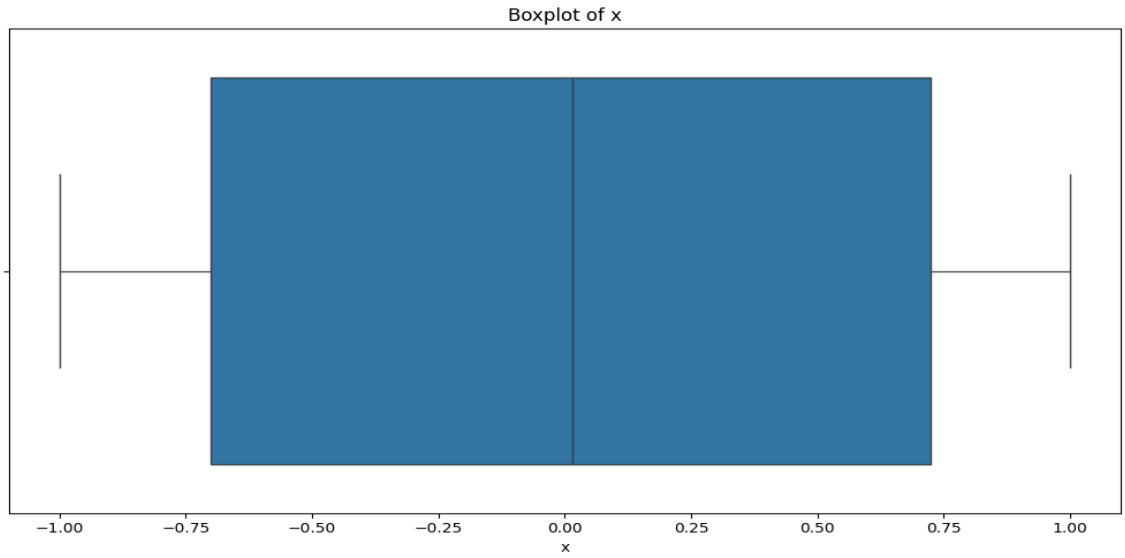
Boxplot for time:



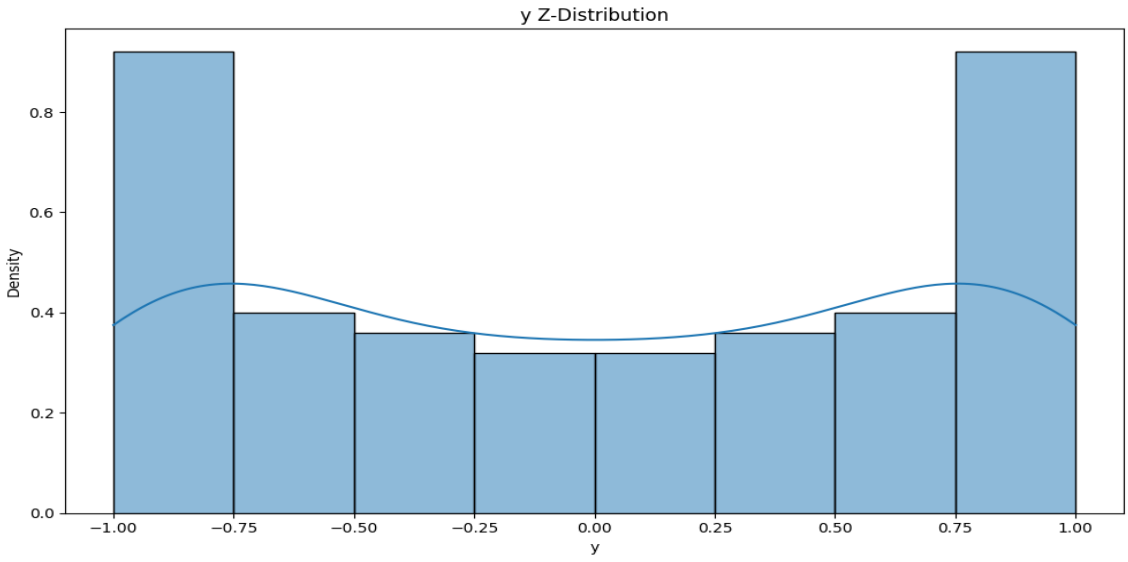
Z-Distribution for x:



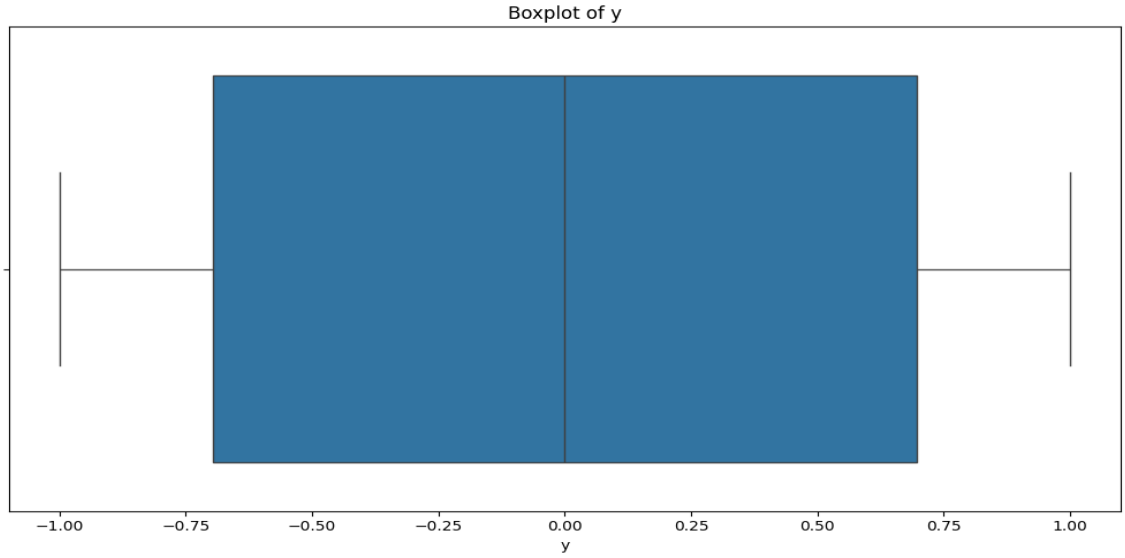
Boxplot for x:



Z-Distribution for y:



Boxplot for y:


Boxplot of y
−1.00
−0.75
−0.50
−0.25
0.00
0.25
0.50
0.75
1.00
y