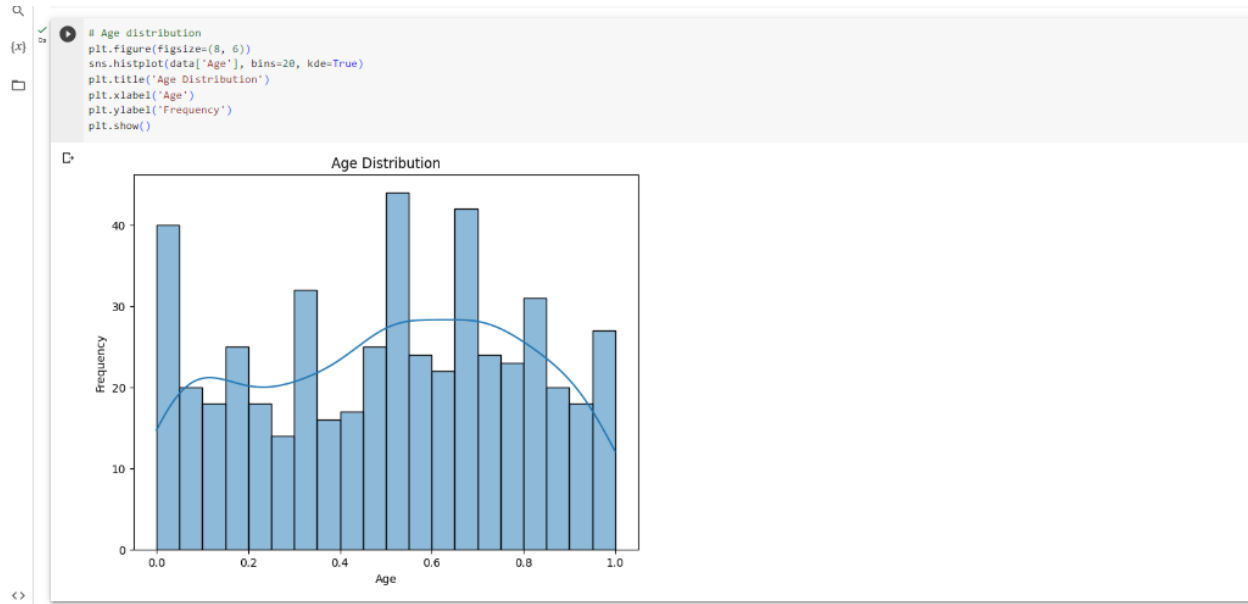


Report

Zunira Sajjad

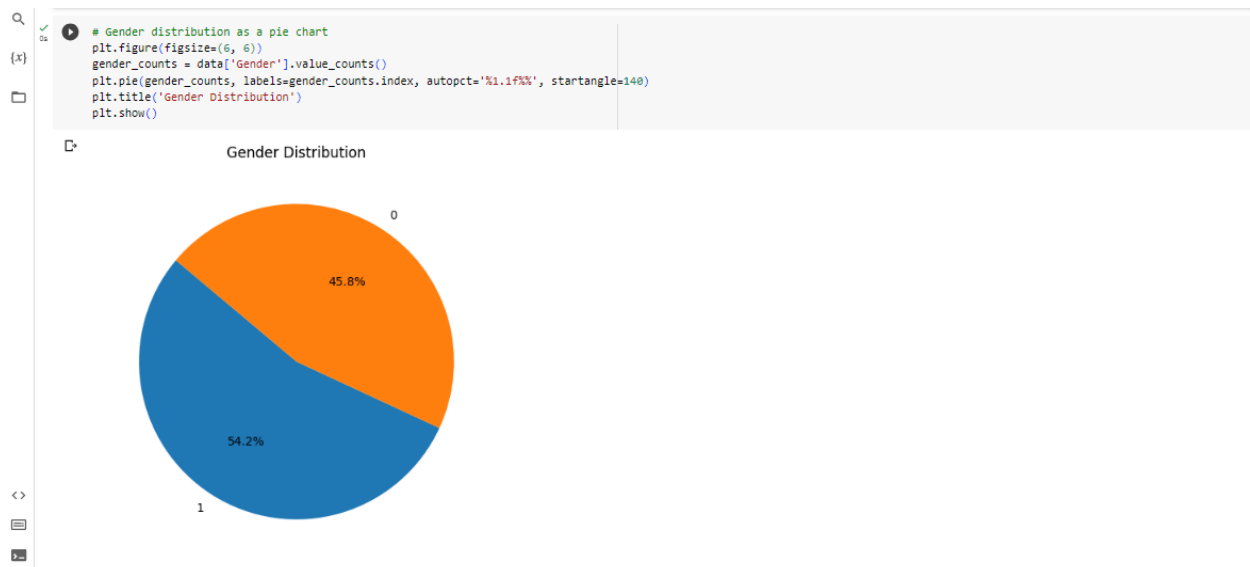
Week_05 Day_01

Age distribution



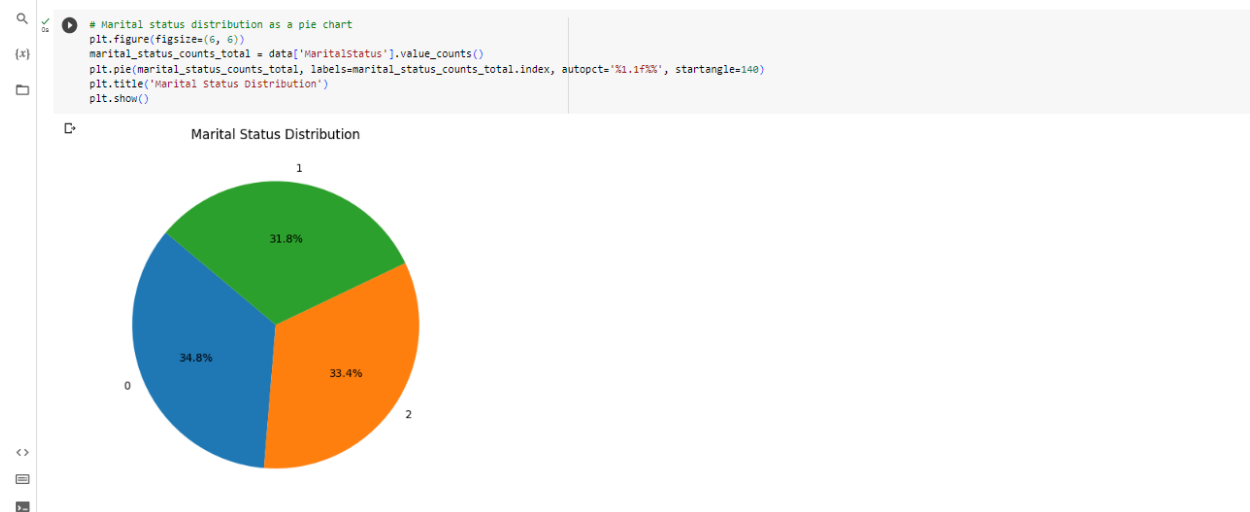
The x-axis of the histogram represents the range of ages, and the y-axis represents the frequency (count) of individuals falling within each age range. The data range of ages is divided into "bins", and the histogram shows how many individuals fall into each bin. The height of each bar in the histogram represents the number of individuals with ages falling within the corresponding age interval (bin). The KDE curve shows where the density of ages is higher or lower.

Gender distribution



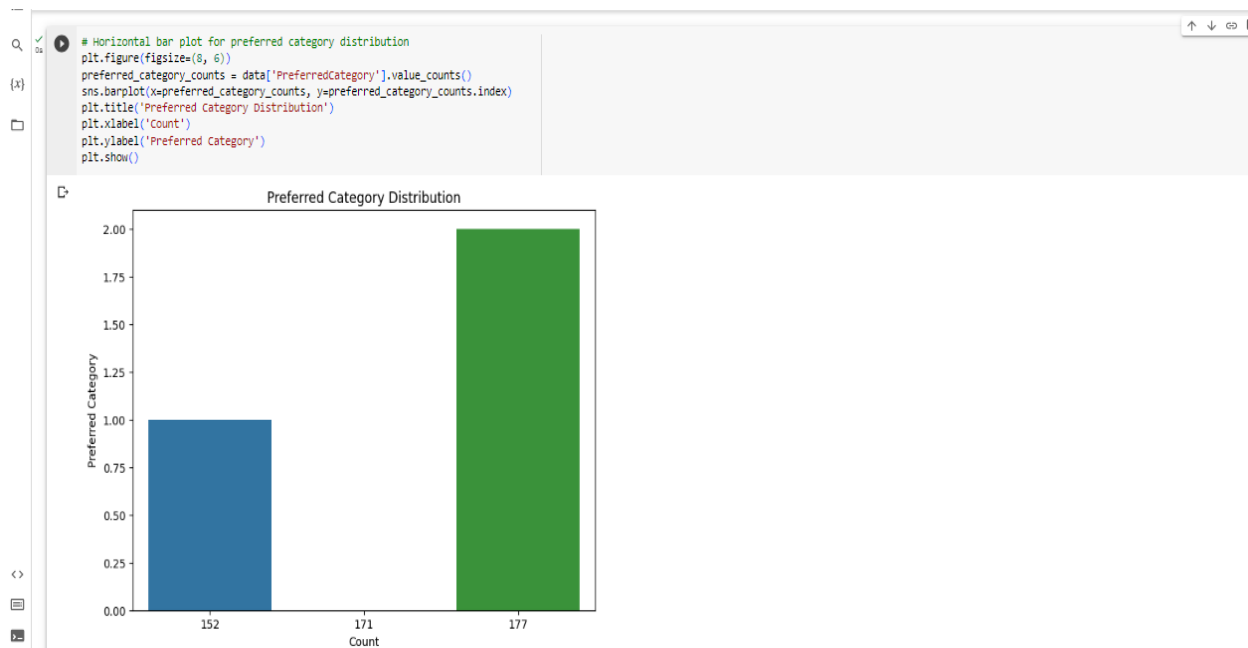
The pie chart represents the proportion of each gender category within the dataset. Each slice of the pie corresponds to a different gender category (e.g., Male, Female). Each slice's size is proportional to the number of individuals in the dataset who belong to that specific gender category. The `autopct='%1.1f%%'` parameter formats the pie chart to show the percentage of each slice relative to the total number of individuals. For each slice, the percentage of individuals with that gender is displayed on the chart. The `startangle=140` parameter sets the starting angle for the first slice. In this case, the starting angle is 140 degrees from the positive x-axis.

Marital Status distribution



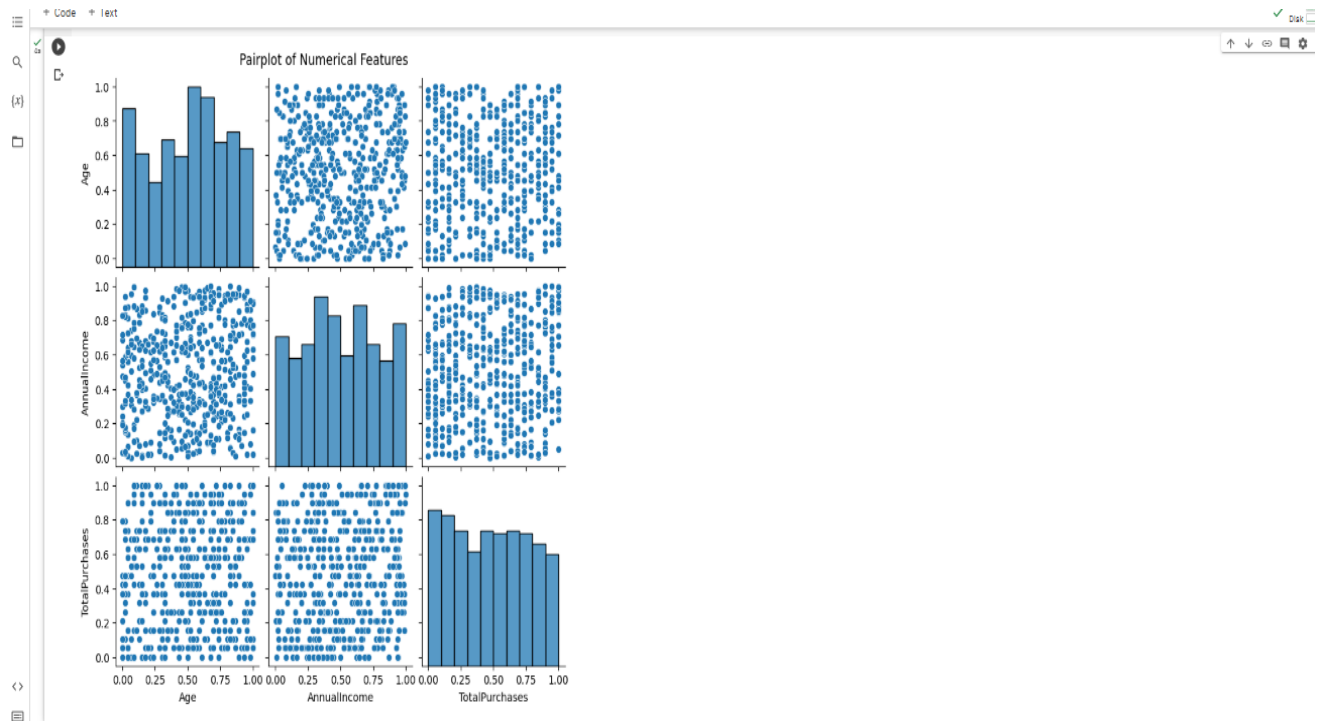
The pie chart represents the proportion of each marital status category within the dataset. Each slice of the pie corresponds to a different marital status category (e.g., Married, Single, Divorced). The remaining information is same as above in gender distribution.

preferred category distribution



The horizontal bar plot represents the count of each preferred category within the dataset. Each horizontal bar corresponds to a different preferred category (e.g., Electronics, Appliances, Clothing). The length of each horizontal bar represents the count of individuals in the dataset who have the corresponding preferred category. The y-axis shows the different preferred category labels. Each bar is labeled with the corresponding preferred category. The x-axis represents the count of individuals for each preferred category.

Numerical Features distribution



A pair plot is a grid of scatter plots that displays relationships between pairs of numerical features. It shows scatter plots for all possible combinations of numerical features in your dataset. Each scatter plot in the pair plot shows the relationship between two numerical features. The x-axis represents one feature, the y-axis represents another feature, and each data point on the scatter plot represents an individual data entry in your dataset. Along the diagonal of the pair plot grid, histograms are shown for each individual numerical feature. These diagonal plots visualize the distribution of each feature.