1. **Payment Mode Sales Analysis: Donut Chart Visualization**

Your task is to take the result of the sum of quantities sold for each payment mode and create a donut chart to visualize the distribution of sales across different payment methods.

**Example approach\_FourthQuestion**

1: Create a figure and axis object using plt.subplots(). This step initializes the figure and creates an axis object for plotting.

fig, ax = plt.subplots()

2: In the same code, create a pie chart using the 'quantity' column as the values and the 'payment\_mode' column as the labels. Set autopct='%1.1f%%' parameter to format the percentages on the pie chart. Use startangle=90 parameter to set the starting angle for the first slice. Use counterclock=False to ensure the slices are arranged in a clockwise direction, and wedgeprops={'width': 0.7} to set the width of the pie slices.

labels = dn\_df['payment\_mode']

sizes = dn\_df['quantity']

ax.pie(sizes, labels=labels, autopct='%1.1f%%', startangle=90, counterclock=False, wedgeprops={'width': 0.7})

3: In the same code block, draw a circle with a radius of 0.4 and color it white to create a donut chart effect.

circle = plt.Circle((0, 0), 0.4, color='white')

ax.add\_artist(circle)

4: In the same code block, add a title to the pie chart using plt.title('Payment Modes and Quantity Sold') and display the chart.

plt.title('Payment Modes and Quantity Sold')

plt.show()

You output should look like this:

