import matplotlib.pyplot as plt

import numpy as np

# Sample age data

np.random.seed(0)

ages = np.random.randint(18, 60, 100)

# Define bins and labels

bins = [18, 25, 30, 35, 40, 45, 50, 55, 60]

labels = ['18-24', '25-29', '30-34', '35-39', '40-44', '45-49', '50-54', '55-59']

age\_groups = np.digitize(ages, bins, right=True)

# Count frequency for each group

freq = [np.sum(age\_groups == i+1) for i in range(len(labels))]

# Plotting the bar chart

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

plt.bar(labels, freq, color='pink', edgecolor='black')

# Add titles and labels

plt.title("Age Distribution in a Population (Bar Chart)", fontsize=14)

plt.xlabel("Age Groups")

plt.ylabel("Frequency")

# Show the chart

plt.show()

