TASK 1) Create a bar chart or histogram to visualize the distribution of a categorical or continuous variable, such as the distribution of ages or genders in a population?

Ans)

SOUCE CODE

import pandas as pd

import matplotlib.pyplot as plt

import seaborn as sns

# Load data from Excel file

file\_path = r'student spending.xlsx' # Update with your file path

data = pd.read\_excel(file\_path)

print(data.head())

# Histogram of Monthly Income for different Age groups

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

sns.histplot(data, x='age', y='monthly\_income', bins=30, pthresh=0.1, cmap="viridis")

plt.title('Histogram of Monthly Income across Age groups')

plt.xlabel('Age')

plt.ylabel('Monthly Income')

plt.grid(True)

plt.show()

HISTOGRAM

