INPUT:

import pandas as pd

import matplotlib.pyplot as plt

# Function to convert Unix timestamp to datetime

def timestamp\_to\_date(timestamp):

    return pd.to\_datetime(timestamp)

# Main function to read data from CSV and perform analysis

def main():

    # Read data from CSV file

    df = pd.read\_csv('bitcoin\_dataset.csv')

    # Basic analysis

    print("Basic Analysis of Bitcoin Price Data:")

    print("Total number of data points:", len(df))

    print("Maximum Bitcoin price:", df['price'].max())

    print("Minimum Bitcoin price:", df['price'].min())

    print("Mean Bitcoin price:", df['price'].mean())

    # Convert timestamp to datetime

    df['date'] = df['date'].apply(timestamp\_to\_date)

    # Plot Bitcoin price over time

    plt.figure(figsize=(10, 6))

    plt.plot(df['date'], df['price'], label='Bitcoin Price (USD)')

    plt.title('Bitcoin Price Over Time')

    plt.xlabel('Date')

    plt.ylabel('Price (USD)')

    plt.legend()

    plt.grid(True)

    plt.show()

if \_\_name\_\_ == "\_\_main\_\_":

    main()

**OUTPUT:**

Basic Analysis of Bitcoin Price Data:

Total number of data points: 2169

Maximum Bitcoin price: 63540.9

Minimum Bitcoin price: 211.4

Mean Bitcoin price: 8703.441539880128

<ipython-input-3-6e1b85bf5cbb>:6: UserWarning: Parsing dates in DD/MM/YYYY format when dayfirst=False (the default) was specified. This may lead to inconsistently parsed dates! Specify a format to ensure consistent parsing.

return pd.to\_datetime(timestamp)

