1. What advantages do Excel spreadsheets have over CSV spreadsheets?

 **Excel** is feature-rich, offering tools for **data analysis, visualization, automation, collaboration**, and **security**, making it suitable for complex, interactive tasks.

 **CSV** is lightweight and better for simple, portable data storage, but it lacks the advanced features provided by Excel.

2.What do you pass to csv.reader() and csv.writer() to create reader and writer objects?

import csv

with open('file.csv', mode='r') as file:

reader = csv.reader(file) # Pass file object to csv.reader()

for row in reader:

print(row)

1. What modes do File objects for reader and writer objects need to be opened in?

with open('file.csv', mode='r') as file:

reader = csv.reader(file)

1. What method takes a list argument and writes it to a CSV file?

data = [['Alice', 30, 'New York'], ['Bob', 25, 'London']]

with open('file.csv', mode='w', newline='') as file:

writer = csv.writer(file)

# Write multiple rows to the CSV file

writer.writerows(data)

1. What do the keyword arguments delimiter and line terminator do?

import csv

data = [['Alice', 30, 'New York'], ['Bob', 25, 'London']]

with open('file.csv', mode='w', newline='') as file:

writer = csv.writer(file, delimiter=';')

writer.writerows(data)

1. What function takes a string of JSON data and returns a Python data structure?

import json

json\_data = '{"name": "Alice", "age": 30, "city": "New York"}'

python\_data = json.loads(json\_data)

print(python\_data)

1. What function takes a Python data structure and returns a string of JSON data?

import json

python\_data = {'name': 'Alice', 'age': 30, 'city': 'New York'}

json\_data = json.dumps(python\_data)

print(json\_data)