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

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

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

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

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

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

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

**ANS:  
Here are the answers to your questions:**

**1. Advantages of Excel spreadsheets over CSV spreadsheets include:**

**- Excel files can contain multiple sheets, while CSV files represent a single sheet.**

**- Excel supports complex formatting, formulas, charts, and macros, which CSV does not.**

**- Excel files can store various types of data within cells, including dates, times, and rich text formatting, whereas CSV files store plain text data only.**

**- Excel files can be easily manipulated and analyzed using Excel's built-in functions and features.**

**2. To create reader and writer objects using the `csv.reader()` and `csv.writer()` functions, you pass a file object opened in read mode (`'r'`) for the reader and write mode (`'w'`) for the writer.**

**3. File objects for reader and writer objects need to be opened in text mode (`'t'`) and with appropriate encoding, typically UTF-8, to ensure compatibility with CSV format.**

**4. The `writerow()` method takes a list argument and writes it to a CSV file. Each element of the list represents a field in the CSV row.**

**5. - The `delimiter` keyword argument specifies the character used to separate fields in the CSV file. By default, it is a comma (`,`).**

**- The `lineterminator` keyword argument specifies the character used to terminate lines in the CSV file. By default, it is the newline character (`\n`).**

**6. The `json.loads()` function takes a string of JSON data and returns a Python data structure (typically a dictionary or a list).**

**7. The `json.dumps()` function takes a Python data structure (such as a dictionary or a list) and returns a string of JSON data.**