**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?**

**SOLUTIONS**

1. *Microsoft Excel spreadsheets have several advantages over CSV (Comma-Separated Values) spreadsheets:*
   * *User-friendly interface: Excel provides a graphical interface for users to interact with their data, allowing for easy navigation, sorting, and formatting.*
   * *Built-in calculations: Excel includes a large number of built-in formulas and functions for data analysis and manipulation, which can save a lot of time compared to manually calculating values in a CSV file.*
   * *Visualization: Excel provides a range of charting options that allow users to create visually appealing graphs and charts from their data.*
   * *Pivot tables: Excel includes a powerful tool for summarizing large amounts of data called pivot tables, which can quickly aggregate and summarize data in a way that is difficult to do in a CSV file.*
2. *In Python, the* ***csv*** *module provides functions for reading and writing CSV files. To create a reader object, you pass an open file object to* ***csv.reader()****. To create a writer object, you pass an open file object to* ***csv.writer()****.*
3. *File objects for reader and writer objects need to be opened in "r" (read) mode and "w" (write) mode, respectively.*
4. *The* ***writerow()*** *method of the* ***csv.writer*** *object takes a list argument and writes it to a CSV file.*
5. *The* ***delimiter*** *keyword argument specifies the character used to separate values in the CSV file, and the* ***line terminator*** *keyword argument specifies the character(s) used to separate rows in the CSV file.*
6. *The* ***json*** *module provides the* ***json.loads()*** *function, which takes a string of JSON data and returns a Python data structure, such as a dictionary or list.*
7. *The* ***json.dumps()*** *function takes a Python data structure and returns a string of JSON data.*