**ANSWERS**

**Q1. What advantages do Excel spreadsheets have over CSV spreadsheets?**

**Ans.** Excel spreadsheets have several advantages over CSV spreadsheets:

* + Excel spreadsheets can contain multiple sheets within a single file, allowing for better organization and structuring of data.
  + Excel supports a wider range of data types and formatting options, including formulas, charts, conditional formatting, and cell merging.
  + Excel provides advanced features such as sorting, filtering, and data validation, which can be helpful for data analysis and manipulation.
  + Excel offers more advanced collaboration features, such as track changes, comments, and password protection.

**Q2.What do you pass to csv.reader() and csv.writer() to create reader and writer objects?**

**Ans.** To create reader and writer objects using the **csv** module, you pass a File object to **csv.reader()** and **csv.writer()** as the first argument. Typically, you would pass an opened CSV file using the **open()** function.

**Q3. What modes do File objects for reader and writer objects need to be opened in?**

**Ans.** File objects for reader and writer objects need to be opened in different modes:

* + For a reader object, the File object needs to be opened in text mode ('rt') or binary mode ('rb').
  + For a writer object, the File object needs to be opened in text mode ('wt') or binary mode ('wb').

**Q4. What method takes a list argument and writes it to a CSV file?**

**Ans.** The **writerow()** method is used to write a list argument to a CSV file. It is called on a writer object and takes a single argument, which is the list of values to be written as a row in the CSV file.

**Q5. What do the keyword arguments delimiter and line terminator do?**

**Ans.** The **delimiter** keyword argument is used to specify the character used to separate fields in the CSV file. The default delimiter is a comma (,), but it can be changed to any character.

The **lineterminator** keyword argument is used to specify the string used to terminate lines in the CSV file. The default line terminator is the newline character **(\n)**, but it can be changed to any string.

**Q6. What function takes a string of JSON data and returns a Python data structure?**

**Ans.** The **json.loads()** function takes a string of JSON data and converts it into a Python data structure. It parses the JSON data and returns the corresponding Python object.

**Q7. What function takes a Python data structure and returns a string of JSON data?**

**Ans.** The **json.dumps()** function takes a Python data structure and converts it into a string of JSON data. It serializes the Python object into a JSON-formatted string representation.