

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

ANS. Advantages of Excel spreadsheets over CSV spreadsheets:

- Excel spreadsheets support more complex data structures and formatting options compared to CSV, such as multiple sheets, formulas, charts, and cell styling.
- Excel provides built-in features for data analysis, sorting, filtering, and visualization.
- Excel supports various data validation options and formulas for data integrity.
- Excel allows for more convenient editing and manipulation of data, including merging cells, inserting/deleting rows or columns, and performing calculations.

2. 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, we can pass a File object to the `csv.reader()` and `csv.writer()` functions, respectively. These File objects can be opened using the built-in `open()` function in the appropriate mode (e.g., "r" for reading, "w" for writing).

3. 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 the following modes:

Reader: The File object for reading a CSV file should be opened in "r" mode (read mode).

Writer: The File object for writing to a CSV file should be opened in "w" mode (write mode).

4. 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. This method belongs to the writer object created using the `csv` module. It takes a list representing a row of data and writes it as a new row in the CSV file.

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

ANS. The keyword arguments `delimiter` and `line terminator` are used to specify the characters used as the field delimiter and line terminator in the CSV file, respectively.

`delimiter`: It separates the fields within a row. By default, it is set to a comma (',').

`lineterminator`: It defines the character(s) used to terminate a line in the CSV file. By default, it is set to a newline ('\n').

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

ANS. The `json.loads()` function is used to take a string of JSON data and convert it into a Python data structure. It parses the JSON string and returns a corresponding Python object.

7. 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 returns a string of JSON data. It serializes the Python object into a JSON-formatted string.