**Assignment-13**

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

Ans: 1. Formatting: Excel allows for more advanced formatting options, such as font styles, colors, and conditional formatting. This can make the data easier to read and understand.

1. Formulas and Functions: Excel has a wide range of built-in formulas and functions that can be used to perform calculations and data analysis. This can save time and effort compared to performing these calculations manually in a CSV file.
2. Data Validation: Excel provides tools for data validation, which can help ensure that data entered into the spreadsheet is accurate and consistent. This can help reduce errors and improve the quality of the data.
3. Pivot Tables: Excel allows users to create pivot tables, which can be used to summarize and analyze large amounts of data quickly and easily. This feature is not available in CSV files.
4. Charts and Graphs: Excel allows users to create charts and graphs based on the data in the spreadsheet. This can help users visualize trends and patterns in the data.

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

Ans: To create reader and writer objects in Python's ‘csv’ module, you need to pass a file object to ‘csv.reader()’ and ‘csv.writer()’. you first open the file using the built-in ‘open()’ function, specifying the mode (in this case, 'r' for reading or 'w' for writing). Then you pass the resulting file object to the appropriate ‘csv’ function to create the reader or writer object.

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

Ans: For reader objects, the file mode should be opened in the read-only mode ('r'). The file will be opened in text mode by default, but if you want to read binary data, you can open the file in binary mode by appending 'b' to the mode ('rb').

For writer objects, the file mode should be opened in the write-only mode ('w'). The file will be opened in text mode by default, but if you want to write binary data, you can open the file in binary mode by appending 'b' to the mode ('wb').

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

Ans: In Python, the ‘csv’ module provides functionality for working with CSV files. To write a list to a CSV file, you can use the ‘csv.writer()’ function.

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

Ans: The ‘delimiter’ argument specifies the character that separates the values in a row of the CSV file. By default, the delimiter is set to a comma (‘,’), but it can be changed to any character, such as a tab (‘\t’) or a semicolon (‘;’), depending on the specific format of the CSV file.

The ‘lineterminator’ argument specifies the character(s) that should be used to terminate each row in the CSV file. By default, the ‘lineterminator’ is set to ‘'\r\n'’ (a carriage return followed by a line feed), which is the standard line ending used in Windows. However, it can be changed to any character or string, depending on the specific requirements of the CSV file.

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

Ans: The ‘json.loads()’ function in Python takes a string of JSON data as input and returns a corresponding Python data structure.

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

Ans: The ‘json.dumps()’ function in Python takes a Python data structure as input and returns a corresponding JSON-formatted string.