**Assignment\_18**

Q1. Describe the differences between text and binary files in a single paragraph.

**Ans: The major difference between these two is that a text file contains textual information in the form of alphabets, digits and special characters or symbols. A binary file contain bytes or a compiles version of text file.**

Q2. What are some scenarios where using text files will be the better option? When would you like to use binary files instead of text files?

**Ans: Its better to use binary file because they are faster and easier for a program to read and write than are text files. Text files are commonly used for storage of information.**

Q3. What are some of the issues with using binary operations to read and write a Python integer directly to disc?

**Ans: All binary files follow a specific format. We can open some binary files in the normal text editor but we can’t read the content present inside it. And also the integers are first converted into binary and then operations are done.**

Q4. Describe a benefit of using the with keyword instead of explicitly opening a file.

**Ans: Using with means that file will be closed as soon as you leave the block. This is beneficial because closing a file is something that can easily be forgotten and ties up resources that you no longer need.**

Q5. Does Python have the trailing newline while reading a line of text? Does Python append a newline when you write a line of text?

Ans**: Yes, Python readline() is a file method that helps to read one complete line from the given file. It has a trailing newline (“\n”) at the end of the string returned.**

Q6. What file operations enable for random-access operation?

**Ans: “rb” we may also use mmap module for random-access.**

Q7. When do you think you'll use the struct package the most?

**Ans: struct package is used in handling binary data stored in files or from network connections. It uses Format strings as compact description of the layout of the C struct.**

Q8. When is pickling the best option?

**Ans: It is better choice for all the remaining use cases If we don’t need a human-readable format or a standard interoperable format, or if you need to serialize custom objects, then go with pickle.**

Q9. When will it be best to use the shelve package?

**Ans: The shelve module implements persistent storage for arbitrary python objects which can be pickled. The sheleve module can be used as a simple persistent storage option for Python objects when a relational database is overkill**.

Q10. What is a special restriction when using the shelve package, as opposed to using other data dictionaries?

**Ans: Only string data type can be used as key in this special dictionary object.**