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

Text files are human readable files. In text files we can easily find errors and correct them. While on the other hand, binary files are not human readable, and we cannot find and rectify errors in them as quick as in case of text files.

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?

Text files are better option when we know we have to check the text and then rectify it if any mistake is found in the text while the binary files are used when we want to protect our data from anybody.

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

Binary operations can only add 0 and 1 to a file therefore, first data needs to converted to binary format in order to write it to the disc.

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

Instead of writing many lines of code to open a file this is done with just a keyword to open a file. Also with just a another keyword we can simply close that file when the work with that file is complete.

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?

Yes, python has trailing newline if specified in text.

No, Python does not automatically trails newline when specify the code. We have to specify it using “\n”

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

r+b operations combined with mmap function we can easiy access the file from anywhere we want

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

The struct package in python is used when we need to convert native python strings and numbers to the python bytes and vice versa

Q8. When is pickling the best option?

Pickling is best option when we want to store a file in a format that we can use and open anytime. Normally, we use to use pickling when we need store a model

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

Shelve is best to use when we need to store the data in the form of key and value pair. We can call and use that data by calling the keys.

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

Shelve package has a restriction that keys can only be defined when they are string data type and value can have output as python object.