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

Text files are organized around lines, each of which ends with a newline character ('\n'). The source code files are themselves text files. A binary file is the one in which data is stored in the file in the same way as it is stored in the main memory for processing.

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?

Developed especially for an application and may not be understood by other applications. Can store different types of data (image, audio, text) in a single file.

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

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

Using with means that **the 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?

Python readline() method reads only one complete line from the file given. **It appends a newline (“\n”) at the end of the line**.

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

Open()

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

*The struct module in Python is used* to convert native Python data types such as strings and numbers into a string of bytes and vice versa*.*

Q8. When is pickling the best option?

Pickle in Python is primarily used in serializing and deserializing a Python object structure.. In other words, it’s the process of converting a Python object into a byte stream to store it in a file/database, maintain program state across sessions, or transport data over the network.

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

The shelve module in Python’s standard library is a simple yet effective tool for persistent data storage when using a relational database solution is not required. The shelf object defined in this module is dictionary-like object which is persistently stored in a disk file.

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

The shelf object defined in this module is dictionary-like object which is persistently stored in a disk file. **Only string data type can be used as key** in this special dictionary object, whereas any picklable object can serve as value.