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

Ans: **Text files are human-readable files and binary files are machine-readable files.**

**Python code is an example of text file and videos, audios, images are example of binary 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?

Ans: **for example, if you have an image file and you want to read it then it has to be read in the ‘rb’ which read in the binary mode. Any human readable code can be read using a text file. Binary data is faster to process if you read an image in non binary format then it will take a bit of time to convert the binary data into characters.**

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

Ans:

**Before writing any integer into disc, it needs to be encoded into bytes and then written onto disc as the data is stored in the binary format.**

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

Ans: **with keyword keeps the file open until the operation is done and then it closes the file itself without having the user to use close() method to close the file.**

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: **Python readline() helps to read one complete line from the given file. The write() doesn’t append a new line. For that, we have to add a new line character**

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

Ans: **seek() method can be used to perform random access input/output on a file.**

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

Ans: **This package is used when you want to convert the native data types of python into string of bytes and vice versa.**

Q8. When is pickling the best option?

Ans: **Pickling is serialising and deserialising a python object structure and it is used when you want to transport data over the network or want to store the bytes of python objects into a file or database.**

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

Ans: **it is best to use this package when you want to store the data without having to use a relational database solution.**

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

Ans: **In this package, only string data type can be used as keys.**