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?

Ans =

When would you like to use binary files instead of 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. It is stored in binary format instead of ASCII characters. It is normally used for storing numeric information (int, float, double).

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

When you read from a binary file, a data type called bytes is used. This is a bit like list or tuple, except it can only store integers from 0 to 255.

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

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?

It has a trailing newline (“\n”) at the end of the string returned. You can also make use of the size parameter to get a specific length of the line. The size parameter is optional, and by default, the entire line will be returned.

Q6Random access (more precisely and more generally called direct access) is the ability to access an arbitrary element of a sequence in equal time or any datum from a population of addressable elements roughly as easily and efficiently as any other, no matter how many elements may be in the set.

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.

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

A “shelf” is a persistent, dictionary-like object. The difference with “dbm” databases is that the values (not the keys!) in a shelf can be essentially ...

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

The shelf dictionary has certain restrictions. Only string data type can be used as key in this special dictionary object, whereas any picklable Python object can be used as value.