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

Ans : 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 : At the bottom level, they are all bits... true. However, some transmission channels have seven bits per byte, and other transmission channels have eight bits per byte. If you transmit ASCII text over a seven-bit channel, then all is fine. Binary data gets mangled.

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?

Ans : The open() function opens a file in text format by default. To open a file in binary format, add 'b' to the mode parameter. Hence the "rb" mode opens the file in binary format for reading, while the "wb" mode opens the file in binary format for writing.

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

Ans : 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?

Ans : 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. You can also make use of the size parameter to get a specific length of the line.

By default, print statements add a new line character "behind the scenes" at the end of the string. This occurs because, according to the Python Documentation: The default value of the end parameter of the built-in print function is \n , so a new line character is appended to the string.

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

Ans : Summary. Random access file in C enables us to read or write any data in our disk file without reading or writing every piece of data before it. ftell() is used to find the position of the file pointer from the starting of the file. rewind() is used to move the file pointer to the beginning of the file.

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

Ans : Structs are best suited for small data structures that contain primarily data that is not intended to be modified after the struct is created. 5) A struct is a value type. If you assign a struct to a new variable, the new variable will contain a copy of the original.

Q8. When is pickling the best option?

Ans : Pickling is a way to convert a python object (list, dict, etc.) into a character stream. The idea is that this character stream contains all the information necessary to reconstruct the object in another python script. # Python3 program to illustrate store. # efficiently using pickle module.

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

Ans : The best-case scenario is that upgrades and updates to the product benefit you, or make no difference to your experience using it. Support May

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

Ans : 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.