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

```
The key difference between text and binary files lies in their internal representation.
Text files store data using a character encoding that maps characters to their corresponding byte
representations, while binary files store data in its raw binary form without any specific character encoding
```

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?

```
1.text files are preferred when dealing with human-readable textual data.
2.Binary files are used for complex data structures, performance optimization, and preserving data
integrity in its raw form
```

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

```
Type information loss
Size and precision consideration
```

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

```
It will automaticly close the file after finishing the execution of with/as block.
It will help beeteer readability
```

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?

```
The trailing newline character(s) at the end of the line are preserved.
Python does not remove or modify the newline character(s) when reading a line from a text file.


```

```
When writing a line of text to a file using the write() or writelines() method, Python does not automatically
append a newline character at the end of the line.
```

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

```
seek()
tell()
```

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

```
when we are working with binary data
```

Q8. When is pickling the best option?

```
When we want to stor the code and tansfer it to some where and reuse it
```

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

```
When we want to store the pyhotn objects and retrive the as key value pairs
```

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

In [ ]:

```
we cannot use other data types such as integers, tuples, or custom objects directly
If you try to use a non-string key, you will encounter a TypeError.
```