

python_advance_assignment_18

May 31, 2023

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

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[ ]: =>The differences between Text Files and Binary Files are:

Text files are special subset of binary files that are used to store human
↳readable characters as a rich text document
or plain text document. Text files also store data in sequential bytes but bits
↳in text file represents characters.

Binary files are those typical files that store data in the form of sequence of
↳bytes grouped into eight bits
or sometimes sixteen bits. These bits represent custom data and
such files can store multiple types of data (images, audio, text, etc) under a
↳single file.
```

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?

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[ ]: => Text files are less prone to get corrupted as any undesired change may just
↳show up once the file is opened and
then can easily be removed. Whereas Use binary files instead of text files for
↳image data.
```

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

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[ ]: => When we read or write a python integer using binary operations

Binary operations deal with raw data
One needs to identify how many bytes one would read or write.
```

```
[ ]: Q4. Describe a benefit of using the with keyword instead of explicitly opening
↳a file ?
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[ ]: => When a file is opened using the with keyword, if some exceptions occur after
↳opening a file,
or at the end of the file it automatically does the closing of the file. There
↳by not leaving an file in open mode
and there would no need to explicitly close a 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? A

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[ ]: => Yes, Python have the trailing newline while reading a line of text. When we
      ↪write a newline has to be
      provided in python explicitly.
```

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

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[ ]: =>The file operations enable for random-access operation are seek() and tell()
```

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

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[ ]: => The struct package is mostly used while converting a common python types
      ↪into C language types.
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[ ]: Q8. When is pickling the best option?
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[ ]: =>Pickling is best option for creating a new binary file using python.
```

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[ ]: Q9. When will it be best to use the shelve package?
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[ ]: => Shelve package is used to pickle data but treats the entire file as
      ↪dictionary.
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[ ]: Q10. What is a special restriction when using the shelve package, as opposed to
      ↪using other data dictionaries?
```

```
[ ]: => Only string data type can be used as key in this special dictionary object,
      ↪whereas any picklable Python object
      can be used as value.
```