**Q1. In Python 3.X, what are the names and functions of string object types?**

**Q2. How do the string forms in Python 3.X vary in terms of operations?**

**Q3. In 3.X, how do you put non-ASCII Unicode characters in a string?**

**Q4. In Python 3.X, what are the key differences between text-mode and binary-mode files?**

**Q5. How can you interpret a Unicode text file containing text encoded in a different encoding than**

**your platform&#39;s default?**

**Q6. What is the best way to make a Unicode text file in a particular encoding format?**

**Q7. What qualifies ASCII text as a form of Unicode text?**

**Q8. How much of an effect does the change in string types in Python 3.X have on your code?**

**SOLUTIONS**

*1. The primary string object type in Python 3.X is str.*

*2. Python 3.X string objects support a wide range of operations, including string formatting, slicing, concatenation, and conversion to other data types.*

*3. Non-ASCII Unicode characters can be included in a string by using the appropriate Unicode escape sequence or by directly including the character in a Unicode string literal.*

*4. Text-mode files are used for reading and writing text data as strings, while binary-mode files are used for reading and writing binary data as bytes. Text-mode files perform automatic decoding and encoding of data based on the file's encoding, while binary-mode files treat data as raw bytes.*

*5. To interpret a Unicode text file containing text encoded in a different encoding than the platform's default, you can use Python's codecs module to specify the file's encoding when reading it into a Unicode string object.*

*6. The best way to make a Unicode text file in a particular encoding format is to explicitly encode the text using the appropriate encoding method and write it to a file in binary-mode.*

*7. ASCII text is a form of Unicode text because ASCII characters are a subset of the Unicode character set.*

*8. The change in string types in Python 3.X from bytes to Unicode can have a significant impact on code that deals with text data, particularly if the code was written to assume that strings are a sequence of bytes. Code that properly handles text as Unicode strings will generally not be affected.*