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

Ans : Function Name -------> Description

capitalize() Converts the first character of the string to a capital (uppercase) letter

casefold() Implements caseless string matching

center() Pad the string with the specified character.

count() Returns the number of occurrences of a substring in the string.

encode() Encodes strings with the specified encoded scheme

endswith() Returns “True” if a string ends with the given suffix

expandtabs() Specifies the amount of space to be substituted with the “\t” symbol in the string

find() Returns the lowest index of the substring if it is found

format() Formats the string for printing it to console

format\_map() Formats specified values in a string using a dictionary

index() Returns the position of the first occurrence of a substring in a string

isalnum() Checks whether all the characters in a given string is alphanumeric or not

isalpha() Returns “True” if all characters in the string are alphabets

isdecimal() Returns true if all characters in a string are decimal

isdigit() Returns “True” if all characters in the string are digits

isidentifier() Check whether a string is a valid identifier or not

islower() Checks if all characters in the string are lowercase

isnumeric() Returns “True” if all characters in the string are numeric characters

isprintable() Returns “True” if all characters in the string are printable or the string is empty

isspace() Returns “True” if all characters in the string are whitespace characters

istitle() Returns “True” if the string is a title cased string

isupper() Checks if all characters in the string are uppercase

join() Returns a concatenated String

ljust() Left aligns the string according to the width specified

lower() Converts all uppercase characters in a string into lowercase

lstrip() Returns the string with leading characters removed

maketrans() Returns a translation table

partition() Splits the string at the first occurrence of the separator

replace() Replaces all occurrences of a substring with another substring

rfind() Returns the highest index of the substring

rindex() Returns the highest index of the substring inside the string

rjust() Right aligns the string according to the width specified

rpartition() Split the given string into three parts

rsplit() Split the string from the right by the specified separator

rstrip() Removes trailing characters

splitlines() Split the lines at line boundaries

startswith() Returns “True” if a string starts with the given prefix

strip() Returns the string with both leading and trailing characters

swapcase() Converts all uppercase characters to lowercase and vice versa

title() Convert string to title case

translate() Modify string according to given translation mappings

upper() Converts all lowercase characters in a string into uppercase

zfill() Returns a copy of the string with ‘0’ characters padded to the left side of the string

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

Ans :

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

Ans : In order to use non-ASCII characters, Python requires explicit encoding and decoding of strings into Unicode. In IBM® SPSS® Modeler, Python scripts are assumed to be encoded in UTF-8, which is a standard Unicode encoding that supports non-ASCII characters.

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

Ans : Binary file contains the data in the form of 0 and 1(series of binary values) and text files contains the data in the form of stream of characters.In general binary files are identified as executable files. But binary files are not in readable form as like text file.

Q5. How can you interpret a Unicode text file containing text encoded in a different encoding than your platform's default?

Ans : If you want to read or write a text file with Python, it is necessary to first open the file. To open a file, you can use Python's built-in open() function. Inside the open() function parentheses, you insert the filepath to be opened in quotation marks.

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

Ans : Use str. encode() and file. write() to write unicode text to a text file

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

Ans : The first 128 Unicode code points represent the ASCII characters, which means that any ASCII text is also a UTF-8 text. ... As long as it contains no code points in the reserved range U+D800–U+DFFF, a UCS-2 text is valid UTF-16 text.

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

Ans : By default, Python 3 stores strings as Unicode whereas Python 2 requires you to mark a string with a “u” if you want to store it as Unicode. Unicode strings are more versatile than ASCII strings, which are the Python 2 default, as they can store letters from foreign languages as well as emoji and the standard Roman letters and numerals.