1. Yes. It is beacause of string immutability that means we can not change the characters in string by assigning new values to indexes.

2. No. When we concatenate string, we assign new value to the same string variable. We are not altering string based on the indexes, so it won't violate Python's string immutability

3. There are two methods for this, find() and index() both will return the lowest index at which char is found.

4. Indexing is a way to access an element of a string by its position or index. Slicing is accessing only part od a string and not a full string. String slicing is done by using index.

5. for both cases, it is 'str' type

6. In Python, There is no char data type, even a single character enclosed in doubble quotes is considered as str.

7. "+" will concatenate two strings and "\*" will repeat the string number of times mentioned. We can also use join() method for getting a larger string.

print("Hello!" + 'How are you?')

print("Rain" \* 4)

l = ['How', 'are', 'you?']

s = ' '.join(l)

print(s)

Hello!How are you?

RainRainRainRain

How are you?

8. Normally, when we use index() method it will return the starting index of a substring, if substring is present in a string. But the major concern is if a substring is not present in a string, index() will return a ValueError. To avoid this, we can first check the target string with in or not in before using the index method to find a substring.

9. Operators:

1. Comparison operators : (== ,!= ,< ,> ,<=, >=)

2. Logical Operators : (and, or, not)

3. Identity Operators : (is , is not)

4. Membership Operators : (in, not in)

String methods:

1. endswith() : Returns true if the string ends with the specified value

2. isalnum() Returns True if all characters in the string are alphanumeric

3. isalpha() Returns True if all characters in the string are in the alphabet

4. isdecimal() Returns True if all characters in the string are decimals

5. isdigit() Returns True if all characters in the string are digits

6. isidentifier() Returns True if the string is an identifier

7. islower() Returns True if all characters in the string are lower case

8. isnumeric() Returns True if all characters in the string are numeric

9. isprintable() Returns True if all characters in the string are printable

10. isspace() Returns True if all characters in the string are whitespaces

11. istitle() Returns True if the string follows the rules of a title

12. isupper() Returns True if all characters in the string are upper case