**WORK SHEET FOR PRACTICE - 4**

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**1. What is the purpose of the join() method in strings?**

a) Combining multiple strings into a single string

b) Extracting characters from a string

c) Converting a string to a list

d) Counting the occurrences of a character

**2. What is the output of the following code? my\_string = "hello world";**

**print(my\_string[0])**

a) h

b) hello world

c) Error: String index out of range

d) l

**3. What is the most efficient way to iterate through the elements of a list in reverse order?**

a) for element in list:

b) for element in list[::-1]:

c) while element in list:

4. How can you check if a specific element exists in a list?

a) if element in list:

b) list.index(element)

c) list.count(element)

d) All of the above  
  
5. What does the following code do?

list1 = [1, 2, 3]

list2 = list1.copy()

list2.append(4)

a) Modifies both lists, adding 4 to both

b) Creates a new list with 1, 2, 3, and 4

c) Modifies list1, not list2

d) No change, as lists are immutable

6. Create a program that removes all even numbers from a list and prints the remaining elements.

7. Write code that checks if a string is a palindrome (reads the same backwards as forwards).

8.

lst1 = [1, 2, [3, 4]]

lst2 = lst1[:]

lst2[2][0] = 5

What is the value of `lst2`?

9.

lst = [1, 2, 3, 4, 5]

output = lst[-2:1]

What is the value of `output`?

a) [3, 4]

b) [2, 3]

c) []

d) Error: Invalid slicing

10. Which of the following methods is used to convert a string to uppercase in Python?

a) to\_upper()

b) uppercase()

c) upper()

d) case\_upper()

11. Which of the following methods is used to add an element to the end of a list in Python?

a) add()

b) insert()

c) append()

d) extend()

12. What does the pop() method do in Python?

a) Removes the last element from the list

b) Removes the first element from the list

c) Removes the element at the specified index from the list

d) Clears all elements from the list

13. Which method is used to sort a list in Python?

a) sort()

b) order()

c) arrange()

d) organized()

14. What will be the output of the following code snippet?

s = "python"

print(s[-3:])  
  
a) "py"

b) "hon"

c) "thon"

d) "python"

15. What will be the output of the following code snippet?

s = "hello"

print(s[::-1])

a) "olleh"

b) "hello"

c) "olle"

d) "hell"

16. Fill ups :-

The method used to find the index of the first occurrence of a substring within a string is \_\_\_\_\_\_\_\_()  
  
The method used to remove the last element from a list and return it is \_\_\_\_\_\_\_\_().

The method used to check if a string ends with a specified substring is \_\_\_\_\_\_\_\_().

The method used to insert an element at a specified position in a list is \_\_\_\_\_\_\_\_()

The method used to concatenate two or more lists in Python is \_\_\_\_\_\_\_\_()  
  
17. Fill up the logic or code:-

Fill in the blank to remove the last element from the list:

numbers = [1, 2, 3, 4, 5]

numbers.\_\_\_\_\_\_\_\_\_\_

print(numbers) # Output: [1, 2, 3, 4]

Fill in the blank to check if the substring "world" exists in the string:

s = "hello world"

if \_\_\_\_\_\_\_\_\_\_:

print("Substring found")

Fill in the blank to remove the first occurrence of the element 3 from the list:

numbers = [1, 2, 3, 4, 3, 5]

numbers.\_\_\_\_\_\_\_\_\_\_(3)

print(numbers) # Output: [1, 2, 4, 3, 5]

Fill in the blank to reverse the elements of the list:

numbers = [1, 2, 3, 4, 5]

numbers.\_\_\_\_\_\_\_\_\_\_

Fill in the blank to convert the string "Hello" to lowercase:

s = "Hello"

s = \_\_\_\_\_\_\_\_\_\_

Fill in the blank to count the number of occurrences of the letter 'o' in the string:

s = "hello world"

count = s.\_\_\_\_\_\_\_\_\_\_('o')

print(count) # Output: 2

Fill in the blank to calculate the sum of all elements in the list numbers:

numbers = [10, 20, 30, 40, 50]

total = \_\_\_\_\_\_\_\_\_\_\_

Fill in the blank to find the maximum element in the list numbers:  
numbers = [10, 20, 30, 40, 50]

maximum = \_\_\_\_\_\_\_\_\_\_\_