INDIAN SCHOOL AL WADI AL KABIR

Worksheet, 2023-24

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| **Class: XI** | **SUB: COMPUTER SCIENCE** | **Date of Completion:** |
| **Worksheet**  | **TOPIC: Lists in Python**  | 4-09-2023 |

**Section A**

Fill in the blanks:

1. List in Python is classified as \_\_\_\_\_\_\_\_\_\_\_ data type.
2. A list consists of elements of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ type.
3. Elements of a list are enclosed in \_\_\_\_\_\_\_\_\_\_\_\_ brackets.
4. Lists are \_\_\_\_\_\_\_\_\_\_\_\_\_, you can update or edit the list.
5. \_\_\_\_\_\_\_\_\_\_\_\_ method is used to delete elements from a list if index is not known.
6. \_\_\_\_\_\_\_\_\_\_\_\_ method is used to delete elements from a list if index is known.
7. The \_\_\_\_\_\_\_\_\_\_\_ method adds a single item to the existing list at the end.
8. You can compare two lists by using \_\_\_\_\_\_\_\_\_\_\_ operators.
9. The \_\_\_\_\_\_\_\_\_\_\_ operator replicates a list.
10. The \_\_\_\_\_\_\_\_\_\_ function arranges of a lst in an ascending or descending order.

**Section B**

Answer the following:

1. What is a list?
2. What is the difference between append() and extend()?
3. What is the difference between pop() and remove()?
4. Write the most appropriate list method to perform the following tasks:
5. Delete a given element from the list :
6. Get the position of an item in the list :
7. Delete the 3rd element from the list:
8. Add single element at the end of the list :
9. Add an element in the beginning of the list :
10. Add elements at the end of the list :

**Section C**

Find the output of the following code:

List1 = [5, 10, 15, 20, 25, 50, 20]

K = List1.index(20)

List1[ k ] = 250

print(List1)

L = [2, 4, 5, 6, 2, 3, 4, 4, 7]

Count = L.count(4)

print(Count)

L2 = [10, 45, 2, 20, 30, 40]

L2.sort()

print(L2)

L2.reverse()

print(L2)

L1 = [500, 600]

L2 = [150, 275, 400]

print(L1 + L2)

L1.append([700,750])

L1.append(800)

print(len(L1))

print(L1)

print(L1.index(800))

L3 = [35, 45]

print(L3 \* 3)

L3.extend([50,75,80])

print(len(L3))

print(L3)

List1 = [20, 40, 30, 50, 60, 40, 50, 30, 10, 20, 60, 30]

print(List1.pop(1))

print(List1.pop())

print(List1.count(30) \* List1.count(60))

**Section D**

1. Write a program to find minimum and maximum element from a list of elements.
2. Write a program to calculate mean/average of a given list of numbers.
3. Write a program to calculate sum of even numbers in the list.
4. Write program to search for an element in a given list of numbers.
5. Write a program to count frequency of a given element in a list of numbers.
6. Write a program to count the no. of even elements in a list of numbers.