WORKSHEET - LIST MANIPULATION

1	What will be the output of following code- **list1=[1, 3, 2]** **list1 * 2** **Ans:**
2	What will be the output of following code- **l="Welcome to Python".split()** **l** **Ans:**
3	What will be the output of following code- **print([i.lower() for i in "HELLO"])** **Ans:**
4	What will be the output of following code- **a=[[[1,2],[3,4],5],[6,7]]** **a[0][1][1]** Ans:
5	What will be the output of following code- **a,b=[3,1,2],[5,4,6]** **a+b** Ans:
6	**What will be the output of following program:** **a=[2,1,3,5,2,4]** **a.remove(2)** **a** Ans:

7	**Explain List Comprehension and Elegant way to create new List:** Ans:
8	**What will be the output of following program:** **theList=[1, 2, [1.1, 2.2]]** **len(theList)** **Ans:**
9	**What will be the output of following program:** **my_list = ['p', 'r', 'o', 'b', 'l', 'e', 'm']** **print('p' in my_list)** **print('a' in my_list)** **print('c' not in my_list)** **Ans:**
10	**What will be the output of following program:** **for fruit in ['apple','banana','mango']:** **print("I like",fruit)** **Ans:**

11	**What will be the output of following program:**
| | ```
pow2 = [2 ** x for x in range(10) if x > 5]
pow2
``` |
| | **Ans:** |

12	**What will be the output of following program:**
| | ```
odd = [x for x in range(20) if x % 2 == 1]
odd
``` |
| | **Ans:** |

13	**What will be the output of following program:**
| | ```
l=[x+y for x in ['Python ','C '] for y in ['Language','Programming']]
l
``` |
| | **Ans:** |

14	**What will be the output of following program:**
| | ```
odd = [1, 9]
odd.insert(1,3)
print(odd)
odd[2:2] = [5, 7]
print(odd)
``` |
| | **Ans:** |

15	**What will be the output of following program:**
| | ```
odd = [1, 3, 5]
print(odd + [9, 7, 5])
print(["re"] * 3)
``` |
| | **Ans:** |

16	**What will be the output of following program:**
| | ```
odd = [2, 4, 6, 8]
odd[0] = 1
print(odd)
``` |

```
odd[1:4] = [3, 5, 7]
print(odd)
```

Ans:

17	**What will be the output of following program:**
	`list1 = ["python", "list", 1952, 2323, 432]`
	`list2 = ["this", "is", "another", "list"]`
	`print(list1)`
	`print(list1[1:4])`
	`print(list1[1:])`
	`print(list1[0])`
	`print(list1 * 2)`
	`print(list1 + list2)`
	Ans:

18	**What will be the output of following program:**
	`l=[10,20,30,40,50,60]`
	`for i in range(1,6):`
	`l[i-1]=l[i]`
	`for i in range(0,6):`
	`print(l[i],end='')`
	Ans:

19	**What will be the output of following program:**
	`l=[6,12,18,24,30]`
	`for i in l:`
	`for j in range(1,i%5):`
	`print(j,'#',end='')`
	`print()`
	Ans:

20	What will be the output of following program: names = ['Hardik', 'Virat', 'Rahul', 'Dhavan'] print(names[-1][-1]) Ans:
21	What will be the output of following program: "Welcome to Python4csip.com".split() Ans:

22	What will be the output of following program:
	myList = [1, 5, 5, 5, 5, 1]
	max = myList[0]
	indexOfMax = 0
	for i in range(1, len(myList)):
	   if myList[i] > max:
	      max = myList[i]
	      indexOfMax = i
	print(indexOfMax)
	
	Ans:

23	What will be the output of the program? m = [[x, x + 1, x + 2] for x in range(0, 3)] m Ans:
24	What will be the output of following program: list("a#b#c#d".split('#')) Ans:

25	What will be the output of following program:
	values = [[3, 4, 5, 1], [33, 6, 1, 2]]
	for row in values:
	   row.sort()
	   for element in row:
	     print(element, end = " ")
	   print()

	Ans:
26	**What will be the output of following program:** **data = [[[1, 2], [3, 4]], [[5, 6], [7, 8]]]** **print(data[1][0][0])** **Ans:**
27	**What will be the output of following program:** **a="hello"** **b=list((x.upper(),len(x)) for x in a)** **print(b)** **Ans:**
28	**What will be the output of following program:** **a=[[]]*3** **a[1].append(7)** **print(a))** **Ans:**
29	**What will be the output of following program:** **L1 = list()** **L1.append([1, [2, 3], 4])** **L1.extend([7, 8, 9])** **print(L1[0][1][1] + L1[2])** **Ans:**
30	**What will be the output of following program:** **List = [True, 50, 10]** **List.insert(2, 5)** **print(List, "Sum is: ", sum(List))** **Ans:**
31	**What will be the output of following program:** **T = [1, 2, 3, 4, 5, 6, 7, 8]** **print(T[T.index(5)], end = " ")**

```
print(T[T[T[6]-2]-4])
```

Ans:

---

32 | **What will be the output of following program:**
```
aList = [4, 8, 12, 16]
aList[1:4] = [20, 24, 28]
print(aList)
```

Ans:

---

33 | **What will be the output of following program:**
```
l = [None] * 10
print(len(l))
```

Ans:

---

34 | **What will be the output of following program:**
```
sampleList = [10, 20, 30, 40, 50]
sampleList.pop()
print(sampleList)
sampleList.pop(2)
print(sampleList)
```

Ans:

---

35 | **What will be the output of following program:**
```
resList = [x+y for x in ['Hello ', 'Good '] for y in ['Dear',
'Bye']]print(resList)
```

Ans:

---

36 | **What will be the output of following program:**
```
aList1 = [123, 'xyz', 'zara', 'abc'];
aList.insert (3,2009)
print ("Final List:::", aList)
```

Ans:

37	**What will be the output of following program:** **A = [2, 4, 6, 8,10]** **L = len (A)** **S = 0** **for I in range (1, L, 2):** **S+=A[I]** **print("Sum=",S)** **Ans:**
38	**Given a Python list, find value 20 in the list, and if it is present, replace it with 200. Only update the first occurrence of a value** **list1 = [5, 10, 15, 20, 25, 50, 20]** **Expected output:** **list1 = [5, 10, 15, 200, 25, 50, 20]** **Ans:**
39	**Which function is used to reverse objects of list in place.** Ans:
40	**Write a Python program to sum all the items in a list.** **Ans:**

41	Write a Python program to get the largest number from a list.
	Ans:
42	Write a Python program to count the number of strings where the string length is 2 or more and the first and last character are same from a given list of strings.
	Sample List : ['abc', 'xyz', 'cbc', '121']
	Expected Result : 2
	Ans:
43	Write a Python program to remove duplicates from a list.
	Ans:

44	Write a program to shift every element of a list to circularly right. E.g.- INPUT : 1 2 3 4 5 OUTPUT : 5 1 2 3 4 Ans:
45	**Take a list of 10 elements. Split it into middle and store the elements in two dfferent lists. E.g.-** **INITIAL list :** **58 24 13 15 63 9 8 81 1 78** **After spliting :** **58 24 13 15 63** **9 8 81 1 78** **Ans:**
46	Python Program to Find the Second Largest Number in a List Ans:
47	What will be the output of the following program:

```
l=[10,20,30,40,50,60]
for i in range(len(l)):
    if(i%2==0):
        print(l[i],end='#')
    else:
        print(l[i])
```

Ans:

48 **What will be the output of the following program:**
```
l=[10,20,30,40,50,60]
for i in range(len(l)):
    if(i%2==0):
        print(l[i],end='#')
    else:
        print(l[i],end='@')
```
Ans:

49 **Program to Find Even elements in a List:**

Ans:

50 **Program to Print list having numbers less than 10**
Ans:

51	**What will be the output of following program:** **l=[[i*j for j in range(1,11)] for i in range(7,9)]** **l** Ans:
52	**WAP to display the frequency of each item in a list.** **Ans:**

53	**What will be the output of the following program:**
	l=[6,12,18,24,30]
	for i in l:
	   for j in range(1,i%4):
	     print(j,'#',end='')
	   print()
	
	Ans: