

**GLS INSTITUTE OF COMPUTER TECHNOLOGY**  
**GLS UNIVERSITY**  
**SEM - I    Subject: Practicals Based on Advanced Python**  
**PRACTICAL ASSIGNMENT - 1 (Unit I)**

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1. Write a Python program to get the largest and smallest number from a list.
2. Write a Python program to sum all the items in a list.
3. Write a Python program to remove duplicates from a list.
4. Write a Python program to print a specified list after removing the 0th, 4th and 5th elements.  
Sample List : ['Red', 'Green', 'White', 'Black', 'Pink', 'Yellow']  
Expected Output : ['Green', 'White', 'Black']
5. Write a Python program to get unique values from a list.
6. Write a Python program that prints all the numbers from 0 to 6 except 3 and 7.
7. Write a Python program which will print Fibonacci series.
8. Write a Python program to check whether a given number is an Armstrong number or not.
9. Write a Python program that will display all the palindrome numbers between 1 to 100.
10. Write a Python program to create a calculator. Accept two numbers from users and operation to perform. According to the input given by the user calculate the result and display it.
11. Write a Python program to swap two numbers.
12. Write a Python program that displays maximum and minimum number from the given range.
13. Write a Python program to sort an element of the list using bubble sort.
14. Write a Python program to get a string made of the first 2 and the last 2 chars from a given string. If the string length is less than 2, return instead of the empty string.  
Sample String : 'GLSUniversity'  
Expected Result : 'GLty'
15. Write a Python program to print a specified list after removing the 0th, 4th and 5th elements.  
Sample List : ['Red', 'Green', 'White', 'Black', 'Pink', 'Yellow']  
Expected Output : ['Green', 'White', 'Black']
16. Write a Python program to replace the last element in a list with another list.  
Sample data : [1, 3, 5, 7, 9, 10], [2, 4, 6, 8]  
Expected Output: [1, 3, 5, 7, 9, 2, 4, 6, 8]
17. Write a Python program to create an union and intersection of sets.
18. Write a Python program to create set difference
19. Write a Python program to check if a set is a subset of another set.
20. Write a Python program to remove all elements from a given set.
21. Write a Python program to find maximum and the minimum value in a set.
22. Write a Python program to check if a given set is superset of itself and superset of another given set.
23. Write a Python program to find the elements in a given set that are not in another set.
24. Write a Python program to create a tuple with different data types.
25. Write a Python program to convert a tuple to a string
26. Write a Python program to find the repeated items of a tuple.
27. Write a Python program to convert a list to a tuple.

28. Write a Python program to concatenate following dictionaries to create a new one.

Sample Dictionary :

dic1={1:10, 2:20}

dic2={3:30, 4:40}

dic3={5:50,6:60}

Expected Result : {1: 10, 2: 20, 3: 30, 4: 40, 5: 50, 6: 60}

29. Write a Python program to check if a given key already exists in a dictionary

30. Write a Python program to print a dictionary where the keys are numbers between 1 and 15 (both included) and the values are square of keys.

Sample Dictionary

{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64, 9: 81, 10: 100, 11: 121,

12: 144, 13: 169, 14: 196, 15: 225}

31. Write a Python program to sum all the items in a dictionary.

32. Write a Python program to combine two dictionary adding values for common keys.

d1 = {'a': 100, 'b': 200, 'c': 300}

d2 = {'a': 300, 'b': 200, 'd': 400}

Sample output: d3({'a': 400, 'b': 400, 'd': 400, 'c': 300})

33. Write a Python program to create a dictionary with cricket players names and scores in a match. Retrieve runs entered by the players names.

34. Write a Python program to get the number of occurrences of a specified element in an array.

35. Write a Python program to remove a specified item using the index from an array.

36. Write a Python program to remove the first occurrence of a specified element from an array.