**PSG COLLEGE OF TECHNOLOGY**

**DEPATMENT OF COMPUTER APPLICATIONS**

**PROBLEMSHEET ON LIST**

**1) Create a list as below**

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

Name= [“Anu”,”Bina”,”Charu”,”Deepak”,”Emily”]

N=5

Students\_list= [Rno, Name, N]

1. Prints the items present in Students\_list.
2. Retrieve name of second, third and fourth student in the list using both positive indexing and negative indexing
3. Retrieve the third item in the list
4. Append roll no 5 at the end of the Rno.
5. Append “Akash” as the first Name.
6. Insert number 0 at the 1st position to the level Rno in Students\_list using insert method.
7. Delete N from Students\_list using del() method.
8. Remove Bina from the level name from Student\_List
9. Use pop() method to delete 5 from the level Rno from Student\_List
10. Add one more level which contains Dept Details of the students at the end of Students List
11. Extract the name from Students list.
12. Extract the second rollno in Students\_list.
13. Reverse a list in Python using
14. Using the list function reverse()
15. Using negative slicing

**Given**

list1 = [100, 200, 300, 400, 500]

**Expected output:**

[500, 400, 300, 200, 100]

1. Add item 7000 after 6000 in the following Python List

**Given**:

list1 = [10, 20, 300, 400, 5000, 6000, 500, 30, 40]

**Expected output:**

[10, 20, 300, 400, 5000, 6000, 7000, 500, 30, 40]

4.You have given a Python list. Replace 20 with 200.

**Given:**

list1 = [5, 10, 15, 20, 25, 50, 20]

**Expected output:**

[5, 10, 15, 200, 25, 50, 20]

5. Write a python program that accepts employee name, salary, and company name from the user

**Input**

Enter Employee Name: Jessa

Enter salary: 8000

Enter Company name: Google

**Output**

Printing Employee Details

Name Salary Company

Jessa 8000 Google

1. Create a list with the elements 2, 4, 6, 8, 10, 12. Remove item present at index 2 using pop() method.

7.Create a list with the elements 2, 4, 6, 8, 10, 12. Remove item from index 2 to 5 using del()method

**Predict the output for the following.**

1. Create a list L with following items. 12,73,55,35,45,90,55 and perform the following operations
2. print(min(L)
3. print(max(L)
4. print(L\*3)
5. L.sort()
6. print(L)
7. L.sort(reverse=True)
8. print(l)
9. L1=[20,50,40,100]
10. L.extend(L1)
11. print(L)
12. print(12 in L)
13. print(12 not in L)
14. print(l[1:7:2])
15. print(L.count(0))
16. L.clear()
17. Print(L)

10.Write a Python program to remove duplicates from a list.

Sample Input

a = [10,20,30,20,10,50,60,40,80,50,40]

Sample Output

{40, 10, 80, 50, 20, 60, 30}

11. Write a Python program to remove and print every third number from a list

of numbers until the list becomes empty.

Sample Input

nums = [10,20,30,40,50,60,70,80,90]

Sample Output

30

60

90

40

80

50

20

70

10

12.Write a Python program to concatenate all elements in a list into a string and

return it.

Sample Input

[2, 50, 12, 9]

Sample Output

250129

13. Write a Python program to filter the positive numbers from a list.

Sample Input

nums = [34, 1, 0, -23]

Sample Output

Original numbers in the list: [34, 1, 0, -23]

Positive numbers in the list: [34, 1]

14. Write a Python function that takes a list of words and returns the longest one.

**Sample Input**

Words = ["PHP", "Java", "Python"]

**Sample Output**

Python

15. Write a Python program to sum all the items in a list.

**Sample Input**

nums = [1,2,3]

**Sample Output**

The sum of numbers in the list:6

16.Write a Python program to find the longest list in a given list.

**Sample Input**

nums =[ [1,2,3],[5,6,7,8],[1,4,5,6,7],[7,8,9]

**Sample Output**

The longest list is [1,4,5,6,7]

16.Write a Python program to create a histogram from a given list of integers.

**Sample Input:**

nums=[2,3,6,5]

Enter the character to be printed: \*

**Sample Output:**

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