

PYTHON ASSIGNMENT - 10

Question 1 –

#1 Write a program to find sum of all elements of list

```
list = [10,20,30,40,50,60,70,80,90,100]
```

```
sum = 0
```

```
for i in list:
```

```
    sum += i
```

```
print(f"The sum of All element is {sum}.")
```

Question 2 –

#2 Write a program to find maximum and minimum element in a list.

```
data = [10,20,30,40,50,60,70,80,90,100]
```

```
maximum = data[0]
```

```
minimum = data[0]
```

```
for i in data:
```

```
    if i > maximum:
```

```
        maximum = i
```

```
    elif i < minimum:
```

```
        minimum = i
```

```
print(f"This is the Maximum :- {maximum}.")
```

```
print(f"This is Minimum :- {minimum}.")
```

Question 3 –

#3 Write a program to find the second largest element in the list.

```
data1 = [10,20,30,40,50,60,70,80,90,100]

maximum = data1[0]
second_maximum = data1[0]

for i in data1:
    if i > maximum:
        second_maximum = maximum
        maximum = i

print("Second Maximun = " , second_maximum)
```

Question 4 –

#4 Write a program to reverse the list without using build in function

```
data3 = [10,20,30,40,50,60,70,80,90,100]

reversed_lIst = []

for i in range(len(data3) - 1, -1, -1):
    reversed_lIst.append(data3[i])

print(reversed_lIst)
```

Question 5 –

```
#5 Accept a number from user and check if this element is present in the list or not. Also tell how many times it is present in the list.

number = int(input("Please Enter the Number :"))

list = [ 10,20,30,40,50,20,70,80,90,100]

count = 0

for x in list:
    if x == number:
        count += 1

if count > 0:
    print(f"The Number {number} is present {count} times in the list.")
else:
    print(f"This Number {number} is not present in the list.")
```

Question 6 –

```
#6 Write a program to remove duplicates from the list without built-in function.

data6 = [ 10,20,10,30,50,10,20,60,70,50,80,90,100]

print("Original List :- ", data6)

for i in data6:
    if data6.count(i) > 1:
        data6.remove(i)

print("Final List :- ", data6)
```

Question 7 –

```
#7 Write a program to create a new list from existing list which contains cube of each number of list.

list1 = [10,20,30,40,50,60,70,80,90,100]

cube_list = []

for i in list1:
    cube_list += [i**3]

print(cube_list)
```

Question 8 –

```
#8 Write a program to create a duplicate of an existing list. It should not point to same list.

list2 = [10,20,30,40,50,60,70,80,90,100]

duplicate_list = list2.copy()

print(duplicate_list)
```

Question 9 –

```
#9 Write a program of having n number of elements in the list and find out even and odd elements in that list

data = [1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16]

even_list = []
odd_list = []

for i in data:
    if i % 2 == 0:
        even_list += [i]
    else:
        odd_list += [i]

print(even_list)
print(odd_list)
```

Question 10 –

```
#10 Write a program to remove all occurrences of a given element in the list.

data = [1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16]

element = int(input("Please Enter the Number : "))

for i in data:
    if i == element:
        data.remove(i)

print(data)
```

Question 11 –

#11 Write a program to print all numbers which are divisible by m and n in the list.

```
from hmac import new

list = [ 10,20,33,42,50,60,70,86,90,100]

m = 5
n = 10

new_list = []

for i in list:
    if i % m == 0 and i % n == 0:
        new_list += [i]

print(new_list)
```

Question 12 -

#12 . Write a program to create three lists of numbers, their squares and cubes.

```
num = int(input("How many elements you want in list : "))

list = []

for i in range(num):
    list.append(int(input("Enter the number : ")))

square_list = [i**2 for i in list]

cube_list = [i**3 for i in list]

print("Original List :- ", list)
print("Square List :- ", square_list)
print("Cube List :- ", cube_list)
```

Question3 –

#13 Write a program to print list after removing even numbers

```
list13 = [ 10,15,20,33,42,50,45,73,86,90,100]
```

```
result_list = []
```

```
for i in list13:  
    if i % 2 != 0:  
        result_list += [i]
```

```
print(result_list)
```