PRACTICE QUESTIONS

SET-1

**1.Write a Python program to create the multiplication table (from 1 to 10) of a number.**

num=int(input("enter a number: "))

for i in range(1,11):

print(i,'x',num,'=',10\*i)

**2. Find the sum of series:**

**a) 1 + 1/2 + 1/3 + ….. + 1/N**

n=int(input("enter a number "))

sum=0

for i in range(n+1):

sum+=1/(i+1)

print(sum)

**b) 1 + 2/4 + 3/9 + ....+ N/(N\*N)**

n=int(input("enter a number "))

sum=0

for i in range(1,n+1):

sum+=i/(i\*i)

print(sum)

**c) 1 + sqrt(2) + sqrt(3) + sqrt(4) + sqrt(N)**

n=int(input("enter a number "))

sum=0

for i in range(1,n+1):

sum+=(1/i)\*\*1/2

print(sum)

**3. Write a Python program which iterates the integers from 1 to 50. For multiples of three print "Fizz" instead of the number and for the multiples of five print "Buzz". For numbers which are multiples of both three and five print "FizzBuzz".**

for i in range(51):

if 1%5==0 and i%3!=0:

print('buzz')

if i%5!=0 and i%3==0:

print('fizz')

if i%5==0 and i%3==0:

print('fizzbuzz')

**4. Write a Python program to find numbers between 1 and 400 (both included) where each digit of a number is an even number. The numbers obtained should be stored in a list and displayed.**

ans=[]

for i in range(1,401):

a=i%10

d=i//10

b=d%10

c=d//10

if a%2==0 and b%2==0 and c%2==0:

ans.append(i)

print(ans)

**5. Given a two Python list. Iterate both lists simultaneously such that list1 should display item in original order and list2 in reverse order list1 = [10, 20, 30, 40] list2 = [100, 200, 300, 400]**

list1 = [10, 20, 30, 40]

list2 = [100, 200, 300, 400]

for i in range(0,4):

print(list1[i],' ',list2[-1-i])

**6. Get first, second best scores from the list. List may contain duplicates.**

scores= [86,86,85,85,85,83,23,45,84,1,2,0]

New\_set=set(scores)

New\_scores=sorted(list(New\_set))

print(New\_scores[-1],New\_scores[-2])

**7. Have a list of number of days in a month and another list of months. Traverse through both the lists appropriately. Write program to display number of days in a month when the user enters the month.**

L1=[Jan,Feb,March...]

L2=[31,28,31..]

L1= ['Jan', 'Feb', 'Mar', 'Apr','May','Jun','Jul','Aug','Sep',"Nov",'Dec']

L2=[31,28,31,30,31,30,31,31,30,31,30,31]

inp=input("Enter first 3 letter of month: ")

if inp in L1:

index=L1.index (inp)

print (L2[index])

**8. Get a list of intergers from the user. Find the sum of all the elements in the even position of the list and store it in a variable called "EvenSum". Find the average of all the elements in the odd position of the list and store it in another variable called "OddAverage".Display both the values.**

inp=eval(input("enter list of numbers: "))

EvenSum=0

OddAverage=0

List=list(inp)

for i in range(len(List)):

if i%2==0:

EvenSum+=inp[i]

else:

OddAverage+=(inp[i])/len(inp)

print(EvenSum)

print(OddAverage)

**9. Get a list of float values from the user and convert the elements to integer. Remove the duplicate values in the resultant list as well. Note: Do not use separate list. Store the result in the same list.**

Input: [2.3, 25.9, 456.01, 31.1, 25.8, 31.8]

Output: [2,26,456,31,32]

List=eval(input())

for i in range(len(List)):

List[i]=(round(List[i]))

for i in List:

if List.count(i)>1:

for j in range(List.count(i)-1):

List.pop(List.index(i,List.index(i)+1,len(List)))

print(List)

**10. Get a list of numbers from the user and sort the list in descending order of the last digit of each of the numbers in the list. Do not use separate list. Do the sorting operation in the same list**

Input: [19,21,38,47,39,56,12,54,75,93]

Output:[19,38,47,56,75,54,93,12,21]

Note: 39 is deleted as there is a number existing in the resultant list which ends in the number 9.

l=eval(input())

for i in range(len(l)):

try:

num=l[i]

last=l[i]%10

for x in l:

if x!=num and x%10==last:

l.remove(i)

for j in range(i+1,len(l)):

if str(l[i])[1]>str(l[j])[1]:

l[j],l[i]=l[i],l[j]

except:

break

l=l[::-1]

print(l)