Slip 1

Q.1] def test\_range(n):

if n in range(1,20):

print("ok")

else:

print("out of range")

test\_range(2)

Q.2] a={'a','b','c','d'}

b={'b','e'}

print(a)

print(b)

result=a.symmetric\_difference(b)

print(result)

result1=a.difference(b)

print(result1)

print('a U b',a.union(b))

print('a & b',a.intersection(b))

slip 2

Q1] t=(2,3,5,6,7,8,6,7,4,6,7)

print(t)

i=t[3]

print("4th element from tuple:",i)

j=t[-4]

print("4th element from last tuple:",j)

Q2] from collections import Counter

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

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

result=Counter(d1)+Counter(d2)

print(result)

slip 4

Q1] t=2,2,4,3,2,2

print(t)

count=t.count(2)

print('REPEATED ITEMS:',count)

Q2] x={'key1':1,'key2':3,'key3':2}

y={'key1':1,'key2':3}

for (key,value) in set(x.items()) & set(y.items()):

print('%s: %s is present in both x and y' % (key,value))

slip 5

Q1] tuple=(4,2,6.8,1.8,10)

print(tuple)

result=sorted(tuple)

print('sorted tuple:',result)

Q2] def recursive\_sum(n):

if n==0:

return 0

else:

return n+recursive\_sum (n-1)

print(recursive\_sum(10))

slip 6

Q1] a={'a','b','c','d'}

b={'b','e'}

print(a)

print(b)

result=a.symmetric\_difference(b)

print(result)

result1=a.difference(b)

Q2] t=2,2,4,3,2,2

print(t)

count=t.count(2)

print('REPEATED ITEMS:',count)

slip 7

Q1] a={11,33,22,55,45,20}

print(a)

c=max(a)

b=min(a)

print('maximum=',c)

print('minimum=',b)

Q2] a=2,2

b=1,2

c=1,4

print('n1:',a)

print('n2:',b)

print('n3:',c)

n1=a,n2=b,n3=c

slip 8

Q1] def average(lst):

return sum(lst)

lst=[11,2,3,4,5]

average=average(lst)

print('average of the list=',round(average,2))

Q2] x={'key1':1,'key2':3,'key3':2}

y={'key1':1,'key2':3}

for (key,value) in set(x.items()) & set(y.items()):

print('%s: %s is present in both x and y' % (key,value))

slip 9

Q1] my\_tuple=()

print(my\_tuple)

my\_tuple=(1,2,3)

print(my\_tuple)

Q2] or) def word\_count(str):

counts=dict()

words=str.split()

for word in words:

if word in counts:

counts[word]+=1

else:

counts[word]=1

return counts

print(word\_count('payal suresh dangat'))

slip 10

Q1] square=lambda x:x\*\*2

print(f'AREA OF SQUARE IS:-{square(5)}')

Q2]

from collections import defaultdict,Counter

str1='payal dangat'

my\_dict={}

for letter in str1:

my\_dict[letter]=my\_dict.get(letter,0)+1

print(my\_dict)

slip 11

Q1] str="aeiou"

allvowels=set("aeiou")

for char in str:

if char in allvowels:

allvowels.remove(char)

print(str)

if len(allvowels) == 0:

print("the string contains all vowels")

else:

print("the string does not contains all vowels")

Q2]

num=123

reverse\_num=0

while(num>0):

reminder=num%10

reverse\_num=(reverse\_num\*10)+reminder

num=num//10

print("reverse number:",reverse\_num)

slip 12

Q1] string=input("enter string:")

count=0

for i in string:

count=count+1

print("length of the string is:")

print(count)

Q2] str="payal dangat"

res=""

print("original string:",str)

for i in range(len(str)):

if i % 2 == 0:

res=res + str[i]

print("remove odd index character:",res)

slip 13

Q1] n=10

n1,n2=0,1

print("fibonacci series:",n1,n2,end="")

for i in range(2,n):

n3=n1+n2

n1=n2

n2=n3

print(n3,end="")

print()

Q2] or)

n=int(input("enter a no"))

d={}

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

d[i]=i\*i

print(d)

slip 14

Q1]

tup=tuple()

n=int(input("total number of values in tuple:"))

for i in range(n):

x=input("enter elements:")

tup=tup+(x,)

print("maximum value:",max(tup))

print("minimum value:",min(tup))

Q2]

lower\_value=int(input("lower range value:"))

upper\_value=int(input("upper range value:"))

print("the prime numbers in the range are:")

for n in range(lower\_value,upper\_value+1):

if n>1:

for i in range(2,n):

if(n%i)==0:

break

else:

print(n)

slip 15

Q1]

string=input("enter string:")

if(string==string[::-1]):

print("the string is a palindrome")

else:

print("the string is not palindrome")

Q2] or)

n=input("enter no:")

sum=0

for i in n:

sum=sum+int(i)

print(sum)

slip 16

Q1]

tup=tuple()

n=int(input("total number of values in tuple:"))

for i in range(n):

x=input("enter elements:")

tup=tup+(x,)

tup1=tup[:5]

tup2=tup[:5]

print(tup1)

print(tup2)

Q2]

n=10

n1,n2=0,1

print("fibonacci series:",n1,n2,end="")

for i in range(2,n):

n3=n1+n2

n1=n2

n2=n3

print(n3,end="")

slip 17

Q1]

str=input("enter string:")

print(str.swapcase())

Q2]

lower\_value=int(input("lower range value:"))

upper\_value=int(input("upper range value:"))

print("the prime numbers in the range are:")

for n in range(lower\_value,upper\_value+1):

if n>1:

for i in range(2,n):

if(n%i)==0:

break

else:

print(n)

slip 18

Q1]

square=lambda x:x\*\*2

print(f'AREA OF SQUARE IS:-{square(5)}')

Q2] or)

def word\_count(str):

counts=dict()

words=str.split()

for word in words:

if word in counts:

counts[word]+=1

else:

counts[word]=1

return counts

print(word\_count('payal suresh dangat'))

slip 19

Q1]

def average(lst):

return sum(lst)

lst=[11,2,3,4,5]

average=average(lst)

print('average of the list=',round(average,2))

Q2] or)

rows=int(input("enter no of rows:"))

for i in range(rows,0,-1):

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

print(j,end="")

print("\n")

slip 20

Q1]

square=lambda x:x\*\*2

print(f'AREA OF SQUARE IS:-{square(5)}')

Q2]

n=input("enter no:")

sum=0

for i in n:

sum=sum+int(i)

print(sum)

slip 21

Q1]

a=2,2

b=1,2

c=1,4

print('n1:',a)

print('n2:',b)

print('n3:',c)

n1=a,n2=b,n3=c

Q2]

print("enter 6 numbers")

a=list()

for i in range(6):

a.append(int(input("enter:")))

if len(set(a))!=len(a):

print("DUPLICATES")

else:

print("ALL UNIQUE")