# Solve 60 example

1-

*"""  
string1 = str(input("enter string 1"))  
print(len(string1))  
"""*"""  
list1=[]  
string2= str(input("enter string 2"))  
for x in string2:  
 list1.append(string2)  
print(len(list1))  
"""

2-

string1= str(input("enter string"))  
if len(string1)>=2 :  
 print(f"{string1[0]}"+f"{string1[1]}"+f"{string1[len(string1)-2]}"+f"{string1[len(string1)-1]}")  
else:  
 print("empty string")

3-

string1=str(input("enter string"))  
if string1[len(string1)-3:len(string1)] =="ing" :  
 print(string1+"ly")  
else:  
 print(string1+"ing")

4-

list1=[]  
max = ""  
size=int(input("enter the size of the list"))  
for x in range(0,size):  
 list1.append(str(input(f"enter word {x+1} ")))  
for long\_name in list1 :  
 if len(max) <= len(long\_name) :  
 max =long\_name  
print(f"the long word is {max}")

5-

*string1 = str(input("enter string: "))  
char1 = chr(input("enter char to change the first char: "))  
char2 =chr (input("enter char to change the last char: "))  
new\_string = char1 + string1[1:len(string1)-1] + char2  
print(new\_string)*

6-

string1= str(input("enter string :"))  
for x in range(1,len(string1),2):  
 print(string1[x] , end="")

8-

name= str(input("enter name:"))  
print(name.upper())  
print(name.lower())

9-

def reverse\_string(string):  
 if len(string) % 4 == 0:  
 return string[::-1]  
 else:  
 return string  
string = reverse\_string(str(input("enter string to reverse")))  
print(string)

10-name = "python\ntest\nnow"  
name2 = name.rstrip('\n')  
print(name)  
print(name2)

11-

name= str(input("enter name to check:"))  
chr\_check= chr(input("enter char to check :"))  
if name.startswith(chr\_check):  
 print("the string is start with the char")  
else:  
 print("the string isn`t start with the char")

13-

numbers = [6.514654, 9.15546, 4.16548, 0.8746457]  
for num in numbers:  
 print("{:.2f}".format(num))

14-numbers = [3.14159, -2.71828, 1.61803, -0.57721]  
  
for num in numbers:  
 if num >= 0:  
 sign = "+"  
 else :  
 sign="-"  
 print("{}{:.2f}".format(sign, abs(num)))

16-

*"""  
rev\_string= str(input("enter string to reverse:"))  
string = rev\_string[::-1]  
print(string)  
"""*rev\_string= str(input("enter string to reverse:"))  
string = "".join(reversed(rev\_string))  
print(string)

19-

strings= str(input("enter string :"))  
for i in strings :  
 strings.replace(" ","")  
print(strings)

21-

list1= [1,5,6,4,7,8,9,4]  
list1[0], list1[-1] = list1[-1], list1[0]  
print(list1)

22-

list1= [1,5,6,4,7,8,9,4]  
pos1=int(input("enter pos1 :"))-1  
pos2=int(input("enter pos2 :"))-1  
list1[pos1],list1[pos2]=list1[pos2],list1[pos1]  
print(list1)

23-

*"""  
lst1 = [1, 2, 3, 4, 5]  
print(len(lst1))  
"""*lst = [1, 2, 3, 4, 5]  
count = 0  
for \_ in lst:  
 count += 1  
print(count)

24-

size = int(input("enter size of list :"))  
lst=[]  
for \_ in range(0,size):  
 lst.append(int(input()))

max=lst[0]  
for z in range(0,size):  
 if max <=lst[z] :  
 max=lst[z]  
print(max)

25-

size = int(input("enter size of list :"))  
lst=[]  
for \_ in range(0,size):  
 lst.append(int(input()))  
min=lst[0]  
for z in range(0,size):  
 if min >=lst[z] :  
 min=lst[z]  
print(min)

26-

lst=[]  
size = int(input(" enter size of the list :"))  
count=0  
for \_ in range(0,size):  
 lst.append(input())  
ele\_check = input("enter to check if element exist :")  
for x in range(0,size):  
 if ele\_check == lst[x] :  
 count+=1  
  
if count>0 :  
 print("the element is exist")  
else:  
 print("the element isn`t exist")

27-

*"""  
lst = [1, 2, 3, 4, 5]  
lst.clear()  
print(lst)  
-----------------------  
lst = [1, 2, 3, 4, 5]  
del lst[:]  
print(lst)  
-----------------------  
lst = [1, 2, 3, 4, 5]  
lst \*= 0  
print(lst)  
-----------------------  
lst = [1, 2, 3, 4, 5]  
lst = []  
print(lst)  
  
"""*

28-

lsita = [1, 2, 3, 4, 5, 1, 2, 3, 6, 4, 8, 9, 6, 5]  
lsita = list(set(lsita))  
print(lsita)

30-

lsita = [1, 2, 3, 4, 5, 1, 2, 3, 6, 4, 8, 9, 6, 5]  
lsita = list(set(lsita))  
print(len(lsita))

34-

lst1=["a","b"]  
lst2=["1","2"]  
lst3=[]  
for x in lst1 :  
 for y in lst2:  
 lst3 +=f"({x}{y})"  
print(lst3)

36-

test\_list = [1, 1, 2, 3, 4, 5, 1, 2]  
item = 1  
c = test\_list.count(item)  
for i in range(c):  
 test\_list.remove(item)  
print(test\_list)

42-

dic1 = {1: 10, 2:20}  
dic2 = {3 :30, 4:40}  
dic3 = {5: 50, 6: 60}  
  
new\_dic = {}  
for d in (dic1, dic2, dic3):  
 new\_dic.update(d)  
  
print(new\_dic)

43-

mydic = {'name': 'mohand', 'age': 19, 'city': 'cairo'}  
for key in mydic:  
 print(key, ':', mydic[key])

44-

dict1 = {'name': 'mohand', 'age': 19}  
dict2 = {'city': 'cairo'}  
dict1.update(dict2)  
print(dict1)

45-

myDic = {'a': 10, 'b': 5, 'c': 20, 'd': 15}  
max1= max(myDic.values())  
min1 = min(myDic.values())  
print('Max value:', max1)  
print('Min value:', min1)

46-

dic = {'c1': 'Red', 'c2': 'Green', 'c3': None}  
dic\_new = {}  
for k, v in dic.items():  
 if v is not None:  
 dic\_new[k] = v  
print(dic\_new)

47-

tub= ('a','3','d')  
x,y,z=tub  
print(tub[0])

48-

tub= ('a','3','d')  
x,y,z=tub  
print(x,y,z)

49-

tub= ('a','3','d')  
lista= list(tub)  
lista.append(input("add var :"))  
new\_tub=tuple(lista)  
print(new\_tub)

50-

tub= ('a','3','d')  
string= str(tub)  
print(string)

51-

lista=[1,2,3,4,5,6]  
tup=tuple(lista)  
print(tup)

52-

tub= ('a','3','d')  
new\_tub=tub[::-1]  
print(new\_tub)

54-

string = "python"  
lista=[]  
for \_ in range(0,len(string)):  
 lista += string[\_]  
tup=tuple(lista)  
print(tup)

56-

sett={1,6,9,8,7,4,5}  
lista=list(sett)  
lista.append(input("enter var:"))  
new\_set=set(lista)  
print(new\_set)

57-

sett={1,6,9,8,7,4,5}  
lista=list(sett)  
lista.remove(1)  
new\_set=set(lista)  
print(new\_set)

58-

set1= {1,2,3,4}  
set2={"one","two","three",2,3,1}  
set3={'p','e','r','f','c','t'}  
print(set1.union(set2))  
print(set3.difference(set1))  
print(set2.intersection(set1))  
print(set2.symmetric\_difference(set1))

59-

sett={1,6,9,8,7,4,5}  
max=max(sett)  
min=min(sett)  
print(f"the max value is :{max} \nthe min value is :{min} ")

60-