1.

sentence=input("Enter the Sentence to find average length of the world :")

#word=sentence.split()

count=0

Sum=1

for i in sentence.split():

Sum+=len(i)

count+=1

total=Sum/count

print("Average length of the Word is",total)

o/p

Enter the Sentence to find average length of the world : every action there is equal and opposite reaction

Average length of the Word is 5.376

2.  
num=int(input("Enter any number :"))

def cal\_factorial(num):

fact=1

if num==0 or num==1:

return 1

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

fact=fact\*i

return fact

output=cal\_factorial(num)

print("Factorial of number",num,"is",output)

o/p

Enter any number :5

Factorial of number 5 is 120

3.

def DtoB(num):

if num>=1:

DtoB(num//2)

print(num%2,end=' ')

dec\_val=int(input("Enter the decimal to convert binary number :"))

print("Binary value of",dec\_val,"is :")

DtoB(dec\_val)

o/p

Enter the decimal to convert binary number :24

Binary value of 24 is :

0 1 1 0 0 0

4.

str1="Hello"

str2="Python"

print(str1+str2)

fstring=f"{str1}{str2}"

str="Always work hard for success"

if "hard" in str:

print("'hard' is present")

print("Always" not in str)

print(str.index("succes"))

print(str[2:6])

print(str.lower())

print(str.upper())

print(str.startswith("Always"))

print(str.endswith("hard"))

print(str.split())

tofind="hard"

print(str.find(tofind))

str3=" we are learning string operation "

print(str3.strip())

prt=str3.count("string")

x=str3.isalnum()

print(x)

y=str3.isalpha()

print(str3.title())

str4="properly"

s=str3.join(str4)

print(str3.replace("we","All"))

new\_str4=str4.center(24)

print(new\_str4)

o/p

HelloPython

'hard' is present

False

21

ways

always work hard for success

ALWAYS WORK HARD FOR SUCCESS

True

False

['Always', 'work', 'hard', 'for', 'success']

12

we are learning string operation

False

We Are Learning String Operation

All are learning string operation

properly

5.

list\_1=[]

n=int(input("Enter the number of element present in list : "))

for n in range(0,n):

ele=str(input())

list\_1.append(ele)

print(list\_1)

list\_1.insert(0,"Mani")

print(list\_1)

list\_pop=list\_1.pop(3)

print(list\_pop)

list\_count=list\_1.count("ela")

print(list\_count)

list\_1.remove("siva")

print(list\_1)

list\_2=[55,22,1,0,53,6]

print(list\_2)

list\_1.extend(list\_2)

print(list\_1)

list\_2.sort()

print(list\_2)

list\_1.reverse()

print(list\_1)

list\_1.clear()

print(list\_1)

o/p

Enter the number of element present in list : 3

siva

ela

mogu

siva

ela

mogu

['siva', 'ela', 'mogu']

['Mani', 'siva', 'ela', 'mogu']

mogu

1

['Mani', 'ela']

[55, 22, 1, 0, 53, 6]

['Mani', 'ela', 55, 22, 1, 0, 53, 6]

[0, 1, 6, 22, 53, 55]

[6, 53, 0, 1, 22, 55, 'ela', 'Mani']

[]

tuple

tuple\_1=("ela","siva"," mogu",34, True,4.0)

print(type(tuple\_1))

print(tuple\_1)

print(tuple\_1.count("ela"))

x =tuple\_1.index(4.0)

print(x)

o/p

<class 'tuple'>

('ela', 'siva', ' mogu', 34, True, 4.0)

1

5

dic

x = ('key1', 'key2', 'key3')

y = 0

thisdict = dict.fromkeys(x, y)

print(thisdict)

car = {

"brand": "Ford",

"model": "Mustang",

"year": 1964

}

x1 = car.get("model")

print(x1)

x2 = car.items()

print(x2)

x3 = car.keys()

print(x3)

x4 = car.values()

print(x4)

car.pop("model")

print(car)

car.popitem()

print(car)

car.update({"color": "White"})

print(car)

o/p

{'key1': 0, 'key2': 0, 'key3': 0}

Mustang

dict\_items([('brand', 'Ford'), ('model', 'Mustang'), ('year', 1964)])

dict\_keys(['brand', 'model', 'year'])

dict\_values(['Ford', 'Mustang', 1964])

{'brand': 'Ford', 'year': 1964}

{'brand': 'Ford'}

{'brand': 'Ford', 'color': 'White'}