1.

def reverse(s):

rev = ""

for i in range(len(s)):

rev = s[i]+rev

print(rev)

s = input("Enter a String:\n")

reverse(s)

2.

def sqList():

mylist = []

for i in range(1,21):

mylist.append(i\*i)

print(mylist)

sqList()

3.

def isPrime(num):

if num > 1:

for i in range(2,num):

if (num%i)==0:

return False

return True

def is\_semiPrime(n):

for d1 in range(2,int(n\*\*0.5)+1):

if n%d1 == 0:

d2 = n//d1

return isPrime(d1) and isPrime(d2) and d1!=d2

return False

def is\_checkNum(n):

for i in range(2,n):

if(is\_semiPrime(i) and is\_semiPrime(n-i)):

print(i," ",n-i)

return "Yes"

return "No"

N = int(input("Enter a number:\n"))

print(is\_checkNum(N),end=" ")

4.

def sentence(s):

u = 0

l = 0

for i in s:

if i.isupper():

u += 1

if i.islower():

l += 1

print(u," ",l)

s = input("Enter a Sentence:\n")

sentence(s)

5.

def second(l):

l.sort()

print(l[1],' ',l[-2])

i = int(input("Enter the total no. of Inputs:\n"))

l = []

for j in range(i):

num = int(input("Enter value: "))

l.append(num)

second(l)

6.

def dictionary(n):

d = {}

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

d[i] = i\*\*3

return(d)

n = int(input("Enter the no. of Values:\n"))

print(dictionary(n))

7.

def string(s):

s += " "

fin = ""

for i in range(len(s)-1):

if s[i] not in "aeiouAEIOU" or s[i+1] not in "aeiouAEIOU":

fin += s[i]

return(fin)

s = input("Enter the String:\n")

print(string(s))

8.

def pushZero(s):

b = []

c = 0

for i in s:

if i == '0':

c += 1

else:

b.append(i)

while(c>0):

b.append("0")

c -= 1

for j in range(len(b)-1):

print(b[j],end=" ")

print(b[-1])

pushZero(input("Enter the numbers seperated by spaces:\n").split())

9.

def armStrong(num):

temp = num

sum = 0

s = str(num)

l = len(s)

while (num!=0):

digit = num%10

sum += digit\*\*l

num = num //10

if temp == sum:

print(temp," is an Armstrong Number")

else:

print(temp," is not an Armstrong Number")

n = int(input("Enter the Number\n"))

armStrong(n)

10.

def special(s):

for i in s:

if i.isalnum()== False and i!=" ":

return True

return False

if special(input("Enter the String\n")):

print("Yes")

else:

print("No")