In [1]:
```
#python level one programs
#1.print
s="hello world"
print(s)
```

```
hello world
```

In [2]:
```
#2.get input and perform addition
r = int(input("enter num:"))
s=int(input("enter num:"))
l=r+s
print(l)
```

```
enter num:4
enter num:6
10
```

In [3]:
```
#3.swap without temp
a=4
b=6
a,b=b,a
print(a,b)
```

```
6 4
```

In [4]:
```
#4.convert the kilo
q=int(input("enter num:"))
w=q*0.621371
print(w)
```

```
enter num:4
2.485484
```

In [5]:
```
#5.check pos,neg ,zero
n=int(input("enter a num:"))
if n==0:
    print("its a zero")
elif n>0:
    print("it is a positive number")
elif n<0:
    print("it is a negative number")
else:
    print(" enter only integers")
```

```
enter a num:-45
it is a negative number
```

In [6]:
```
#6.leap year or not
n=int(input("enter a year"))
if((n%4==0)and (n%100!=0)) or (n%400==0):
    print("its a leap year")
else:
    print("it is not leap year")
```

```
enter a year2004
its a leap year
```

In [20]:
```
#7.prime
d=int(input("enter the min number:"))
u=int(input("enter the max number:"))
print("prime number between",d,"to",u,"are")
for i in range(d,u+1):
    for j in range(2,i):
        if(i%j==0):
            break
    else:
        print(i)
```

```
enter the min number:1
enter the max number:10
prime number between 1 to 10 are
2
3
5
7
11
```

In [19]:
```
#8.fibonacci
p=int(input("enter sequence:"))
n1=0
n2=1
c=0
if p<0:
    print("enter a positive number")
elif p==1:
    print("fibonacci series  upto",p,":")
    print(n1)
else:
    print("fibonacci series")
while c<p:
    print(n1)
    nn=n1+n2
    n1=n2
    n2=nn
    c+=1
```

```
enter sequence:7
fibonacci series
0
1
1
2
3
5
8
```

In [22]:
```
#9.armstrong number or not

k=int(input("enter the number:"))
sum=0
temp=k
d=temp%10
e=(temp//10)%10
f=int(temp//100)
sum=(d**3)+(e**3)+(f**3)
if sum==k:
    print("it is a armstrong number")
else:
    print("it is not a armstrong number")
```

```
enter the number:371
it is a armstrong number
```

In [24]:
```
#10.sum of natural numbers up to nth term
y=int(input("enter the range"))
sum=0
for x in range(1,y+1,1):
    sum=x
print("sum of n terms",sum)
```

```
enter the range25
sum of n terms 325
```

In [26]:
```
#11.show stars(row)
def stars(row):
    for i in range(1,row+1):
        print("*"*i)
stars(int(input("enter numbers:")))
```

```
enter numbers:5
*
**
***
****
*****
```

In [28]:
```
#12.remove characters from a string upto terms
def remove(s,n):
    return s[n:]
k=input("enter the string:")
i=int(input("enter the index number:"))
j=remove(k,i)
print(j)
```

```
enter the string:python
enter the index number:2
thon
```

In [4]:
```
#13.iterate given numbers and print which are divisible by 5
n=int(input("enter the range:"))
list=[]
for i in range(0,n):
    c=int(input("enter the elements: "))
    list.append(c)
print("the numbers divisible by 5 are: ")
for i in list:
    if i%5==0:
        print(i)
```

```
enter the range:5
enter the elements: 20
enter the elements: 16
enter the elements: 30
enter the elements: 10
enter the elements: 3
the numbers divisible by 5 are:
20
30
10
```

In [37]:
```
#14.program to find how many times substring "hi" appears
s=("hi madam, hi sir,hi  everyone")
subs="hi"
count=s.count(subs)
print("The count of the substring is : ",count)
```

```
The count of the substring is :  3
```

In [39]:
```
# 15.Print the number pattern
n = 6
for number in range(n):
    for i in range(number):
        print(number, end=" ")
    print(" ")
```

```
1
2 2
3 3 3
4 4 4 4
5 5 5 5 5
```

In [42]:
```
#16.to check it is palindrome or not
num = input("Enter a number:")
if num == num[::-1]:
    print("Yes its a palindrome")
else:
    print("No, its not a palindrome")
```

```
Enter a number:505
Yes its a palindrome
```

In [45]:
```
#list exercise
#17.program to interchange 1st and last
l=[10,"hi11","moon",25,"mountain"]
l[0],l[len(l)-1]=l[len(l)-1],l[0]
print(l)
```

```
['mountain', 'hi11', 'moon', 25, 18]
```

In [46]:
```
#18.swap two elements in list
def swap(list,pos1,pos2):
    list[pos1],list[pos2]=list[pos2],list[pos1]
    return list
list=["hi","sang","python","program"]
pos1,pos2=1,3
print(swap(list,pos1-1,pos2-1))
```

```
['python', 'sang', 'hi', 'program']
```

In [47]:
```
#19 ways to find length of list
l=["hi",45,78,"sang","jaan"]
s=len(l)
print(s)
#using naive method
count=0
for i in l:
    counter = counter + 1
print("the len of list using naive method:" +str(counter))
#using enumerate
s=0
for i, a in enumerate(l):
    s += 1
print(s)
```

```
5
the len of list using naive method:5
5
```

In [48]:
```
#20.max of two number
l=[45,67]
print(max(l))
```

```
67
45
```

```
#21.min of two
print(min(l))
```

In [49]:
```
#string exercise
#22.symmetric or palindrome
n=(input("enter a string"))
symmetrical = n== n[::-1]
palindrome = n == "".join(reversed(n))
if symmetrical:
    print("it is symetric")
else:
    print("not symetric")
if palindrome:
    print("it is palindrome")
else:
    print("it is not a plaindrome")
```

```
enter a stringradar
it is symetric
it is palindrome
```

In [50]:
```
#23.reverse words
s=" this is sangeetha "
rs=s.split()
r.reverse()
c=" ".join(r)
print(c)
```

```
sangeetha is this
```

In [51]:
```
#24.ways to find length
l='he l i  o   pyth o n'
print(len(l))
#another
def findLen(l):
    counter = 0
    while l[counter:]:
        counter += 1
    return counter

print(findLen(l))
```

```
20
20
```

In [52]:
```
#25.ways to remove character
s="sangee"
d=int(input("index to be removed"))
t=s[:d]+s[d+1:]
print(t)
```

```
index to be removed5
sange
```

In [53]:
```
#26.print even words
g=input("enter string:")
s=n.split(" ")
for i in s:
    if len(i)%2==0:
        print(i)
```

```
enter string:hi sang
```

In [54]:
```
#tuple
#27.size of a tuple
import sys
t=("sangee")
print("size of t :" +str(sys.getsizeof(t)) +"bytes")
```

```
size of t :55bytes
```

In [55]:
```
#28.maximum and minimum k elements
import heapq
t = (67,4,8,56)
K = 2
minimum = heapq.nsmallest(K, t)
maximum = heapq.nlargest(K, t)
print("the maximum value",maximum)
print("the minimum value",minimum)

the maximum value [67, 56]
the minimum value [4, 8]
```

In [ ]:
```

```

In [60]:
```
#29.sum
def sum(elements):
    tr(elements)
    count=0
    for i in t:
        count += i
    return count

elements=(3,4,7,8,10)
print(sum(elements))
```

```
32
```

In [62]:
```
#30.row wise elmennt addiyion in tuple matrix
matrix = ((1,2,3),(4,5,6),(7,8,9))
print("My row matrix:",matrix)
print("The sum of each row matrix is:")
for row in matrix:
    row_sum = sum(row)
    print(row_sum)
```

```
My row matrix: ((1, 2, 3), (4, 5, 6), (7, 8, 9))
The sum of each row matrix is:
6
15
24
```

In [ ]:
```

```

In [ ]:
```

```

In [ ]:
```

```