In [ ]:
```
print("hello world");
```

In [2]:
```
a=int(input("enter a number:"))
b=int(input("enter a number:"))
sum=a+b
print("the sum is:",sum)
```

```
enter a number:3
enter a number:3
the sum is: 6
```

In [3]:
```
x=4
y=8
x,y=y,x
print("a=",x,"b=",y)
```

```
a= 8 b= 4
```

In [4]:
```
km=int(input("enter value in kilometers:"))
cf=0.621371
m=km*cf
print("km to miles",(km,m))
```

```
enter value in kilometers:4
km to miles (4, 2.485484)
```

In [5]:
```
a=int(input("enter a number"))
if a>0:
    print("positive number")
elif a==0:
    print("zero")
else:
    print("negative number")
```

```
enter a number4
positive number
```

In [ ]:
```
#prime number within integral
a=int(input("enter the year"))
if(a%4==0)and(a%100!=0)or(a%400==0):
    print("leap year")
else:
    print("not leap year")
```

In [5]:
```
a=int(input("enter the lower range:"))
b=int(input("enter the higher range:"))
for n in range(a,b+1):
    if n>1:
        for i in range(2,n):
            if(n%i)==0:
                break
        else:
            print(n)
```

```
enter the lower range:3
enter the higher range:90
3
5
7
11
13
17
19
23
29
31
37
41
43
47
53
59
61
67
71
73
79
83
89
```

In [6]:
```
a=int(input("enter the range:"))
n1,n2=0,1
c=0
if a==0:
    print("enter the positive number")
elif a==1:
    print("fibonacci series upto",a,":")
    print(n1)
else:
    print("fibonacci sequence:")
while c<a:
    print(n1)
    nxn1+n2
    n1=n2
    n2=n
    c+=1
```

```
enter the range:5
fibonacci sequence:
0
1
1
2
3
```

In [10]:
```
a=int(input("enter the number:"))
sum=0
temp=a
while(temp>0):
    digit=temp%10
    sum+=digit**3
    temp//=10
if a==sum:
    print(a,"is an armstrong number")
else:
    print(a,"is not an armstrong number")
```

```
enter the number:4
4 is not an armstrong number
```

In [13]:
```
# Sum of natural numbers up to num

num = int(input("enter the number:"))

if num < 0:
   print("Enter a positive number")
else:
   sum = 0
   # use while loop to iterate until zero
   while(num > 0):
       sum += num
       num -= 1
   print("The sum is", sum)
```

```
enter the number:45
The sum is 1035
```

In [14]:
```
rows = int(input("Enter number of rows: "))

for i in range(rows):
    for j in range(i+1):
        print("* ", end="")
    print("\n")
```

```
Enter number of rows: 5
*

* *

* * *

* * * *

* * * * *
```

In [ ]:
```
input_string = "Adcictcya"
char_to_remove = "c"
newStr = ""
for character in input_string:
    if character != char_to_remove:
        newStr += character

print("The input string is:", input_string)
print("The character to delete is:", char_to_remove)
print("The output string is:", newStr)
```

```
The input string is: Adcictcya
The character to delete is: c
The output string is: Adityа
```

In [12]:
```
list_1 = [13, 14, 87, 44, 70, 9]

result = list (filter (lambda x: (x % 5 == 0), list_1))

print ("Numbers that are divisible by 5 are:",result)
```

```
Numbers that are divisible by 5 are: [70]
```

In [15]:
```
s = 'hihihi'
sb = 'hi'
results = 0
sub_len = len(sb)
for i in range(len(s)):
    if s[i:i+sub_len] == sb:
        results += 1
print(results)
```

```
3
```

In [17]:
```
rows = 6
for i in range(rows):
    for j in range(i):
        print(i, end=' ')
    print('')
```

```

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

In [18]:
```
n=int(input("Enter number:"))
temp=n
rev=0
while(n>0):
    dig=n%10
    rev=rev*10+dig
    n=n//10
if(temp==rev):
    print("The number is a palindrome!")
else:
    print("The number isn't a palindrome!")
```

```
Enter number:545
The number is a palindrome!
```

In [19]:
```
def swapList(newList):

    newList[0], newList[-1] = newList[-1], newList[0]

    return newList
newList = [12, 35, 9, 56, 24]
print(swapList(newList))
```

```
[24, 35, 9, 56, 12]
```

In [20]:
```
def swapPositions(list, pos1, pos2):

    list[pos1], list[pos2] = list[pos2], list[pos1]
    return list
List = [23, 65, 19, 90]
pos1, pos2  = 1, 3

print(swapPositions(List, pos1-1, pos2-1))
```

```
[19, 65, 23, 90]
```

In [21]:
```
li = [10, 20, 30]
n = len(li)
print("The length of list is: ", n)
```

```
The length of list is:  3
```

In [28]:
```
list1 = [3, 2, 8, 5, 10, 12]
list1.sort()
print(list1)
print("maximum of two numbers:",list1[-1],list1[-2])
```

```
[2, 3, 5, 8, 10, 12]
maximum of two numbers: 12 10
```

In [30]:
```
list1 = [3, 2, 8, 5, 10, 12]
list1.sort()
print(list1)
print("minimum of two numbers:",list1[0],list1[1])
```

```
[2, 3, 5, 8, 10, 12]
minimum of two numbers: 2 3
```

In [32]:
```
def palindrome(a):
    mid=(len(a)-1)/2
    start=0
    last=len(a)-1
    flag=0
    while(start<mid):
        if(a[start]==a[last]):
            start+=1
            last-=1
        else:
            flag=1
            break;
    if flag==0:
        print("the entered string is palindrome")
    else:
        print("the entered string is not palindrome")

def symmetry(a):
    n=len(a)
    flag=0
    if n%2:
        mid=n//2+1
    else:
        mid=n//2
    start1=0
    start2=mid
    while(start1<mid and start2<n):
        if(a[start1]==a[start2]):
            start1+start1+1
            start2+start2+1
        else:
            flag=1
            break
    if flag==0:
        print("the entered string is symmetrical")
    else:
        print("the entered string is not symmetrical")



string='amaama'
palindrome(string)
symmetry(string)
```

```
the entered string is palindrome
The entered string is symmetrical
```

In [36]:
```
string = "welcome to the karkalan magic show"
s = string.split()[::-1]
l = []
for i in s:
    l.append(i)
print(" ".join(l))
```

```
show magic karkalan the to welcome
```

In [39]:
```
string1 = "subashinicarounagarane"
string2 = ""

for i in range(len(string1)):
    if i != 2:
        string2 = string2+ string1[i]
print ("The string after removal of i'th character : " +string2)
```

```
The string after removal of i'th character : suashinicarounagarane
```

In [46]:
```
string="subashini"
a=len(string)
print(a)
```

```
9
```

In [49]:
```
n="Never give up"
s=n.split(" ")
for i in s:
    if len(i)%2==0:
        print(i)
```

```
give
up
```

In [53]:
```
size = ("A", 1, "B", 2, "C", 3)

print("Size of Tuple1: " + str(size.__sizeof__()) + "bytes")
```

```
Size of Tuple1: 72bytes
```

In [25]:
```
t=(1,2,3,4,5)
print("maximum value=",max(t))
print("minimum value=",min(t))
```

```
maximum value= 5
minimum value= 1
```

In [22]:
```
def summation(test_tup):
    test = list(test_tup)
    count = 0
    for i in test:
        count += i
    return count
test_tup = (5, 20, 3, 7, 6, 8)
print(summation(test_tup))
```

```
49
```

In [27]:
```
tmat=((1,2,3),(4,5,6),(7,8,9))
for row in tmat:
    s=sum(row)
    print("row sum:",s)
```

```
row sum: 6
row sum: 15
row sum: 24
```

In [ ]:
```

```