In [1]:
```
#Display “Hello World” in your output screen
print("hello world")
```

```
hello world
```

In [56]:
```
#Get the input from the user and perform addition of two numbers
a=int(input("enter the first number:"))
b=int(input("enter the second number:"))
c=a+b
print("the sum is:",c)
```

```
enter the first number:7
enter the second number:4
the sum is: 11
```

In [4]:
```
#convert the entered kilometres
a=int(input("enter the number of kilometres:"))
a=a*0.621371
print("the number of metres is",a)
```

```
enter the number of kilometres:3
the number of metres is 1.8641130000000001
```

In [6]:
```
#check whether the given number is positive, negative or 0
a=int(input("enter the number :"))
if a > 0:
 print("positive number")
elif a < 0:
 print("negative number")
else:
 print("zero")
```

```
enter the number :4
positive number
```

In [7]:
```
#verify that the given year is a leap year
year=int(input("enter the year:"))
if year/4 :
 print("it is a leap year")
else:
 print("it is not a leap year")
```

```
enter the year:2018
it is a leap year
```

In [11]:
```
#display the prime numbers within the given interval
a=int(input("enter the min number:"))
b=int(input("enter the max number:"))
print("prime number between",a,"to",b,"are")
for num in range(a,b+1):
    for i in range(2,num):
       if(num%i==0) :
          break
       else:
          print(num)
```

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

In [14]:
```
#Fibbonacci nmubers
a=0
b=1
n=int(input("Enter the range: "))
print("The fibonacci numbers are: ")
for x in range(1,n-1,1):
  sum=a+b
  print(sum)
  a=b
  b=sum
```

```
Enter the range: 10
The fibonacci numbers are:
1
2
3
5
8
13
21
34
```

In [2]:
```
#check if the number is an Armstrong number or not
y=int(input("Enter your number:"))
sum=0
temp=y
d=temp%10
e=(temp//10)%10
f=int(temp/100)
sum=(d**3)+(e**3)+(f**3)
if sum==y:
 print("It is an armstrong number")
else:
 print("It is not an armstrong number")
```

```
Enter your number:4
It is not an armstrong number
```

In [58]:
```
#Find the Sum of natural numbers up to n-th term
y=int(input("enter the sum for n th term: "))
sum=0
for x in range(1,y+1,1):
 sum+=x
print("sum of n terms",sum)
```

```
enter the sum for n th term: 5
sum of n terms 15
```

In [57]:
```
#Write a function called show_stars(rows). If rows are 5, it should print the followi
def show_stars(rows):
    for i in range(1,rows+1):
     print("*"*i)
show_stars(int(input("Enter your number: ")))
```

```
Enter your number: 5
*
**
***
****
*****
```

In [15]:
```
#Write a program to remove characters from a string starting from zero up to n and
def remove_chars(str, n):
 return str[n:]
my_string = input("Enter your string:")
i=int(input("Enter the index number where u want to remove: "))
new_string = remove_chars(my_string, i)
print(new_string)
```

```
Enter your string:ilaks
Enter the index number where u want to remove: 3
ks
```

In [20]:
```
#Iterate the given list of numbers and print only those numbers which are divisible
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 divisibl by 5 are : ")
for i in list:
 if i%5==0:
   print(i)
```

```
enter the range : 5
enter the elements : 34
enter the elements : 78
enter the elements : 65
enter the elements : 45
enter the elements : 42
the numbers divisibl by 5 are :
65
45
```

In [21]:
```
#Write a program to find how many times substring “Hi” appears in the given string.
str=("Hi,This is my python assignment ,Hi")
substr="Hi"
```

```
count=str.count(substr)
print("The count of the substring is : ",count)
```

```
The count of the substring is :  2
```

In [25]:
```
#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 [27]:
```
#Write a program to check if the given number is a palindrome number
num = input("Enter a number:")
if num == num[::-1]:
 print("Yes its a palindrome")
else:
 print("No, its not a palindrome")
```

```
Enter a number:282
Yes its a palindrome
```

In [28]:
```
#Python program to interchange first and last elements in a list
my_list = [15,86,95,76,73,64]
print("Initial list: ")
print(my_list)
my_list[0], my_list[-1] = my_list[-1], my_list[0]
print("Updated list after swapping:")
print(my_list)
```

```
Initial list:
[15, 86, 95, 76, 73, 64]
Updated list after swapping:
[64, 86, 95, 76, 73, 15]
```

In [29]:
```
#Swapping of two numbers in a list
my_list = [58,75,69,37,25,589]
print("The initial list is:")
print(my_list)
i1 =int(input("Enter i1:"))
i2 =int(input("Enter i2:"))
temp = my_list[i1]
my_list[i1] = my_list[i2]
my_list[i2] = temp
print("The Updated list is:")
print(my_list)
```

```
The initial list is:
[58, 75, 69, 37, 25, 589]
Enter i1:4
Enter i2:2
The Updated list is:
[58, 75, 25, 37, 69, 589]
```

In [30]:
```
#Python Ways to find length of list
my_list = [100,200,300,400,500]
print("My list elements: ")
print(my_list)
length = len(my_list)
print("The total length of my list is: ")
print(length)
```

```
My list elements:
[100, 200, 300, 400, 500]
The total length of my list is:
5
```

In [31]:
```
#Maximum of two numbers in Python
a=int(input("Enter the value of a:"))
b=int(input("Enter the value of b:"))
if(a>b):
 print ("a is greater")
else:
 print("b is greater")
```

```
Enter the value of a:4
Enter the value of b:8
b is greater
```

In [32]:
```
#Minimum of two numbers in Python
a=int(input("Enter the value of a:"))
b=int(input("Enter the value of b:"))
if(a<b):
 print ("a is smaller")
```

```
else:
 print("b is smaller")
```

```
Enter the value of a:4
Enter the value of b:6
a is smaller
```

In [34]:
```
#Python program to check whether the string is Symmetrical or Palindrome
my_string = input("Enter the string:")
symmetrical = my_string == my_string[::-1]
palindrome = my_string == "".join(reversed(my_string))
if symmetrical:
 print("The string is symmetrical")
else:
 print("The string is not symmetrical")
if palindrome:
 print("The string is a palindrome")
else:
 print("The string is not a palindrome")
```

```
Enter the string:malayalam
The string is symmetrical
The string is a palindrome
```

In [35]:
```
#Reverse words in a given String in Python
my_string = "hey ilaks"
print("My initial string is:")
print(my_string)
words = my_string.split()
words.reverse()
new_string = " ".join(words)
print("My reversed string is:")
print(new_string)
```

```
My initial string is:
hey ilaks
My reversed string is:
ilaks hey
```

In [36]:
```
#Ways to remove i’th character from string in Python
my_string = "Hello!"
index_to_remove =int(input("Enter the index number to be removed:"))
new_string = my_string[:index_to_remove] + my_string[index_to_remove+1:]
print(new_string)
```

```
Enter the index number to be removed:4
Hell!
```

In [37]:
```
#Find length of a string in python
my_string = "hey ilaks"
string_length = len(my_string)
print("Length of my string is:")
print(string_length)
```

```
Length of my string is:
9
```

In [45]:
```
#Python program to print even length words in a string
print('enter a string')
n=input()
s=n.split(" ")
print("The even indexed strings are:")
for i in s:
 #checking the length of words
 if len(i)%2==0:
    print(i)
```

```
enter a string
python program
The even indexed strings are:
python
```

In [48]:
```
#Python program to Find the size of a Tuple
import sys
# Define a tuple
my_tuple = ('ilaks',2003)
# Get the size of the tuple in bytes
size = sys.getsizeof(my_tuple)
# Print the size in bytes
print(f"The size of the tuple is {size} bytes")
```

```
The size of the tuple is 56 bytes
```

In [51]:
```
#Python – Maximum and Minimum K elements in Tuple
import heapq
def find_k_largest_smallest_elements(k, my_tuple):
 # Find the k largest elements using the nlargest function
 largest_elements = heapq.nlargest(k, my_tuple)

 # Find the k smallest elements using the nsmallest function
 smallest_elements = heapq.nsmallest(k, my_tuple)
```

```
 return largest_elements, smallest_elements
my_tuple = (10,20,30,40,50,60,70,80,90,100)
k=int(input("Enter no. of elements needed:"))
largest, smallest = find_k_largest_smallest_elements(k, my_tuple)
print(f"The {k} largest elements in the tuple are: {largest}")
print(f"The {k} smallest elements in the tuple are: {smallest}")
```

```
Enter no. of elements needed:3
The 3 largest elements in the tuple are: [100, 90, 80]
The 3 smallest elements in the tuple are: [10, 20, 30]
```

In [52]:
```
#Python – Sum of tuple elements
my_tuple=(20,40,50,60,80)
print("Tuple=",my_tuple)
sum_of_tuple = sum(my_tuple)
print("The sum of my tuple elements is:", sum_of_tuple)
```

```
Tuple= (20, 40, 50, 60, 80)
The sum of my tuple elements is: 250
```

In [54]:
```
#Python – Row-wise element Addition 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:
24
```

In [59]:
```
#swap two variables without temp variable
a=int(input("enter the first number:"))
b=int(input("enter the second number:"))
print("before swapping",a,b)
a=a+b
b=a-b
a=a-b
print("after swapping",a,b)
```

```
enter the first number:5
enter the second number:4
before swapping 5 4
after swapping 4 5
```

In [ ]: