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

```
hello world
```

In [6]:
```
#2.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:5
enter the second number:5
the sum is: 10
```

In [19]:
```
#3.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:2
enter the second number:3
before swapping 2 3
after swapping 3 2
```

In [2]:
```
#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:58
the number of metres is 36.039518
```

In [23]:
```
#5.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 [10]:
```
#6.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:2004
it is a leap year
```

In [18]:
```
#7.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:1
enter the max number:15
prime  number between 1 to 15 are
2
3
5
7
11
13
```

In [3]:
```
# 8. 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 [ ]:
```
# 9.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")
```

In [1]:
```
# 10. 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: 10
sum of n terms 55
```

In [3]:
```
# 11.Write a function called show_stars(rows). If rows are 5, it should print the follow
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 [3]:
```
# 12. 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:tree
Enter the index number where u want to remove: 3
e
```

In [4]:
```
# 13.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 : 23
enter the elements : 24
enter the elements : 25
enter the elements : 26
enter the elements : 26
the numbers divisibl by 5 are :
25
```

In [1]:
```
#14.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 [2]:
```
# 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 [17]:
```
#16.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:505
Yes its a palindrome
```

In [1]:
```
#17.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 [2]:
```
# 18. 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 i1:2
Enter i2:4
The Updated list is:
[58, 75, 25, 37, 69, 589]
```

In [3]:
```
#19.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 [4]:
```
#20.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:20
Enter the value of b:10
a is greater
```

In [6]:
```
#21.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:20
Enter the value of b:10
b is smaller
```

In [7]:
```
#22.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:madam
The string is symmetrical
The string is a palindrome
```

In [8]:
```
#23.Reverse words in a given String in Python
my_string = "Python Programming"
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:
Python Programming
My reversed string is:
Programming Python
```

In [9]:
```
#24.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:3
Helo!
```

In [10]:
```
#25.Find length of a string in python
my_string = "hello world"
string_length = len(my_string)
print("Length of my string is:")
print(string_length)
```

```
Length of my string is:
11
```

In [11]:
```
#26.Python program to print even length words in a string
print("Enter your 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 your string:
hi this is keerthana
The even indexed strings are:
hi
this
is
```

In [12]:

```
#27.Python program to Find the size of a Tuple
import sys
# Define a tuple
my_tuple = ('keerthana',2005)
# 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 [13]:

```
#28.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:5
The 5 largest elements in the tuple are: [100, 90, 80, 70, 60]
The 5 smallest elements in the tuple are: [10, 20, 30, 40, 50]
```

In [14]:

```
#29.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 [15]:

```
#30.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:
6
15
24
```