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In [1]: #1. Display "Hello World" in your output screen.
print("Hello World")

Hello World

In [64]: #2. Get the input from the user and perform addition of two numbers.
a=int(input("Enter the value of a:"))
b=int(input("Enter the value of b:"))
c=a+b
print(c)

Enter the value of a:12
Enter the value of b:14
26

In [65]: #3. Swap two variables without temp variables.
a=int(input("Enter the value of a:"))
b=int(input("Enter the value of b:"))
a=a+b
b=a-b
a=a-b
print("The value of a is",a)
print("The value of b is",b)

Enter the value of a:23
Enter the value of b:25
The value of a is 25
The value of b is 23

In [66]: #4. Convert the entered kilometres.
kilometres=int(input("Enter the kilometre:"))
confac=0.621371
a=kilometre*confac
print(a)

Enter the kilometre:345
214.372995

In [67]: #5. Check whether the given number is positive,negative or zero.
a=int(input("Enter the value of a:"))
if a>0:
    print("positive")
elif a==0:
    print("zero")
else:
    print("negative")

Enter the value of a:34
positive

In [68]: #6. Verify that the given year is a leap year.
year=int(input('Enter the year'))
if(((year%4==0)and(year%100!=0))or(year%400==0)):
    print("Leap year")
else:
    print("Not a leap year")

Enter the year2005
Not a leap year

In [69]: #7. Display the prime numbers within the given intervals.
lower_value = int(input("Please, Enter the Lowest Range Value: "))
upper_value = int(input("Please, Enter the Upper Range Value: "))

print ("The Prime Numbers in the range are: ")
for number in range (lower_value, upper_value + 1):
    if number > 1:
        for i in range (2, number):
            if (number % i) == 0:
                break
            else:
                print (number)

Please, Enter the Lowest Range Value: 34
Please, Enter the Upper Range Value: 57
The Prime Numbers in the range are:
37
41
43
47
53

In [70]: #8. Display the Fibonacci sequence upto the n-th term.
num = int(input("Enter the number:"))
n1, n2 = 0, 1
print("Fibonacci Series:", n1, n2, end=" ")
for i in range(2, num):
    n3 = n1 + n2
    n1 = n2
    n2 = n3
    print(n3, end=" ")
print()

Enter the number:5
Fibonacci Series: 0 1 1 2 3

In [71]: #9. Check if a number is armstrong or not.
num = int(input("Enter a number: "))

sum = 0

temp = num
while temp > 0:
    digit = temp % 10
    sum += digit ** 3
    temp //= 10

if num == sum:
    print(num,"is an Armstrong number")
else:
    print(num,"is not an armstrong number")

Enter a number: 234
234 is not an armstrong number

In [72]: #10. Find the sum of natural numbers upto n-th term.
num = int(input("Enter the number:"))

if num < 0:
    print("Enter a positive number")
else:
    sum = 0
    while(num > 0):
        sum += num
        num -= 1
    print("The sum is", sum)

Enter the number:34
The sum is 595

In [73]: #11. Write a function called as show star.

rows = int(input("Enter the number of rows:"))
for i in range(0, rows):
    for j in range(0, i + 1):
        print(" *", end=" ")
    print("\n")

Enter the number of rows:5
*
*
* *
* * *
* * * *
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In [74]: #12. Write a program to remove characters from a string.
s=input("Enter any string: ")
n=int(input("Enter how much to remove:"))
b=len(s)
print(s[n:])

Enter any string: hello
Enter how much to remove:2
llo

In [75]: #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:16
The sum is 136

In [76]: #14.write a program to find how many times substring "hi" appears in the given string
list=input("enter a sentence : ")
list=s.split(' ')
n=len(list)
c=0
for i in range (n):
    if list[i]=="hi":
        c+=1
if c!=0:
    print("'hi' is present {} times".format(c))
else:
    print("'hi' is not present")

enter a sentence : hi hello
'hi' is present 1 times

In [77]: #15. print the pattern
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 [78]: #16.prg to check whether the given no. is palidrome or not
def isPalindrome(str):
    for i in range(0, int(len(str)/2)):
        if str[i] != str[len(str)-i-1]:
            return False
    return True
s = str(input("Enter the string:"))
ans = isPalindrome(s)

if (ans):
    print("Yes")
else:
    print("No")

Enter the string:malayalam
Yes

In [79]: #17. python program to interchange first and last element
list=["India","Srilanka","Canada","France","America","Germany"]
print("Initial list")
print(list)
list.remove('India')
list.remove('Germany')
list.insert(0, 'Germany')
list.insert(5, 'India')
print("List after interchanging:")
print(list)

Initial list
['India', 'Srilanka', 'Canada', 'France', 'America', 'Germany']
List after interchanging:
['Germany', 'Srilanka', 'Canada', 'France', 'America', 'India']

In [80]: #18. python program to swap two numbers in a list
list=[0,1,2,3,4,5]
print("Initial list:")
print(list)
temp=list[2]
list[2]=list[3]
list[3]=temp
print("List after swapping:")
print(list)

Initial list:
[0, 1, 2, 3, 4, 5]
list after swapping:
[0, 1, 3, 2, 4, 5]

In [81]: #19. Python ways to find the length of the list
li=[11,22,33,44,55,66]
n = len(li)
print("The length of list is: ", n)

The length of list is: 6

In [82]: #20. Max of two numbers
a=int(input("enter the first number:"))
b=int(input("enter the second number:"))
if a>b:
    print("a is greater")
else:
    print("b is greater")

enter the first number:23
enter the second number:34
b is greater

In [83]: #21. Min of two numbers
a=int(input("enter the first number:"))
b=int(input("enter the second number:"))
if a<b:
    print("a is smaller")
else:
    print("b is smaller")

enter the first number:34
enter the second number:45
a is smaller

In [84]: #22.prg to find the given string is palidrome or symmetrical
val=input("Enter sting value: ")
print("pallindrome checking:\n")
if val==val[::-1]:
    print("It is a pallindrome")
else:
    print("It is not a pallindrome")
print("symmetrical checking:\n")
half=len(val)//2
if val[half:]==val[:half]:
    print("It is symmetrical")
else:
    print("It is not symmetrical")

Enter sting value: hello
pallindrome checking:

It is not a pallindrome
symmetrical checking:

It is not symmetrical

In [85]: #23.reverse words in the given python program
def reverse(s):
    str = ""
    for i in s:
        str = i + str
    return str

s = "Geeksforgeeks"

print("The original string is : ", end="")
print(s)

print("The reversed string(using loops) is : ", end="")
print(reverse(s))

The original string is : Geeksforgeeks
The reversed string(using loops) is : skeegrofkskeeg

In [86]: #24. Ways to remove i'th character from string in Python

name=input("enter the name : ")
i=int(input("enter pos u want to remove : "))
c=name[i]
name1=name.replace(c,'')
print(name1)

enter the name : abinaya
enter pos u want to remove : 0
biny

In [87]: #25.Find length of a string in python

str = "geeks for geeks"
print(len(str))

15

In [88]: #26.Python program to print even length words in a string
s="This is a python language"
n=s.split(" ")
for i in s:

    if len(i)%2==0:
        print(i)

This
is
python
language

In [89]: #27.python program to find the size of the tuple
a = ("geeks", "python", "tuple")
b = ("programs", "Coding")
print("Size of the tuple is", len(a))
print("Size of the tuple is", len(b))

Size of the tuple is 3
Size of the tuple is 2

In [4]: #28. Python-Maximum and Minimum K elements in a tuple.
t=(1,2,3,4,5)
print("Maximum value= ",max(t))
print("Minimum value= ",min(t))

Maximum value= 5
Minimum value= 1

In [62]: #29. Python-Sum of tuple elements.
t=(1,2,3,4,5)
print("Sum of elements in the tuple:",sum(t))

Sum of elements in the tuple: 15

In [61]: #30. Python-Rowwise element addition in tuple.
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
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