

In [132]:

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1.# Write a python program to calculate sum of first 10 number using user define function.
num = int(input("Enter a number: "))
sum = 0
i = 1
while(i<=num):
    sum = sum + i
    i = i + 1
print("printing sum:" ,sum)
```

Enter a number: 5
printing sum: 15

In [11]:

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2.# Write a python program to calculate sum of 2 number using lambda function.
x = lambda a, b: a * b
print(x(4, 7))
```

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In [15]:

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3.# Write a python program to calculate factorial of a number using function.
num = int(input("Enter a number: "))
def factorial(x):
    if x == 1:
        return 1
    else:
        return (x * factorial(x-1))
result = factorial(num)
print("The factorial of", num, "is", result)
```

Enter a number: 8
The factorial of 8 is 40320

In [17]:

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4.# Write a python program to print a person's bio (Input should taken from user).
name = input("Enter a person name: ")
age = input("Enter age: ")
company = input("Enter company name: ")
salary = input("Enter salary: ")
print("name","age","company","salary")
print("print person's details")
```

Enter a person name: PUSPITA GIRI
Enter age: 21
Enter company name: MAKAUT
Enter salary: 000000
name age company salary
print person's details

In [18]:

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5.# Write a python program to calculate total marks and average marks of a student .(take 3
a = int(input("Enter the marks of first subject: "))
b = int(input("Enter the marks of second subject: "))
c = int(input("Enter the marks of third subject: "))
total = (a + b + c)
average = total/3
print("The total number of three subject is = ",total)
print("The average number of three subject is = ",average)
```

```
Enter the marks of first subject: 95
Enter the marks of second subject: 92
Enter the marks of third subject: 91
The total number of three subject is = 278
The average number of three subject is = 92.66666666666667
```

In [23]:

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6.# Take 3 subjects input (max.mark is 100) ,pass marks is 35% .calculate a student pass or
sub1 = int(input("Enter the marks of first subject: "))
sub2 = int(input("Enter the marks of second subject: "))
sub3 = int(input("Enter the marks of third subject: "))
total_marks = 300
obtain_marks = (sub1 + sub2 + sub3)
per = (obtain_marks / 3)
if per >= 35:
    print("student will be pass")
else:
    print("student will be fail")
```

```
Enter the marks of first subject: 67
Enter the marks of second subject: 45
Enter the marks of third subject: 55
student will be pass
```

In [27]:

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7.# Print a students marks grade(input take from user) ;if student (get 90-100 it print O),
marks = int(input("Enter a number: "))
if marks > 90:
    print("Grade: O")
elif marks >= 80 and marks < 90:
    print("Grade: E")
elif marks >= 70 and marks < 80:
    print("Grade: A")
elif marks >= 60 and marks < 70:
    print("Grade: B")
elif marks >= 50 and marks < 60:
    print("Grade: C")
else:
    print("Grade: F")
```

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Enter a number: 72
Grade: A
```

In [30]:

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8.# Write a python program to calculate sum of digits of a number (Ex. 123 i.e 1+2+3=6).
num = int(input("Enter a number: "))
s = 0
while num > 0:
    rem = num % 10
    s = s+rem
    num = num//10
print("sum is: ",s)
```

Enter a number: 123
sum is: 6

In [31]:

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9.# Write a python program to reverse a number ( ex 123 is 321).
num = int(input("Enter number: "))
rev = 0
while num > 0:
    dig = num % 10
    rev = rev * 10 + dig
    num = num // 10
print("Reverse of the number:",rev)
```

Enter number: 123
Reverse of the number: 321

In [116]:

```
10.# Write a python program to check a number armstrong or not.
num = int(input("Enter a number: "))
sum = 0
temp = num
while temp > 0:
    digit = temp % 10
    cube = digit ** 3
    sum = sum + cube
    temp//= 10
if (sum == num):
    print("Armstrong Number is: ",num)
else:
    print("Armstrong Number isn't: ", num)
```

Enter a number: 153
Armstrong Number is: 153

In [53]:

```
11.# Write a python program to check if a number is prime or not.
number = int(input("Enter a number: "))
if number > 1:
    for i in range(2, number):
        if (number % i) == 0:
            print(number, "is not a prime number")
            break
else:
    print(number, "is a prime number")
```

Enter a number: 78
78 is not a prime number

In [72]:

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12.# Write a python program to calculate all prime number in a interval.
lower = int(input("Enter lower range: "))
upper = int(input("Enter upper range: "))
for num in range(lower,upper + 1):
    if num > 1:
        for i in range(2,num):
            if (num % i) == 0:
                break
        else:
            print(num)
```

Enter lower range: 3
Enter upper range: 29
3
5
7
11
13
17
19
23
29

In [105]:

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13.# Write a python program to check if a number is Krishnamurthy or not.
num = int(input("Enter a number: "))
sum = 0
m = num
while m > 0:
    r = m % 10
    f = 1
    for i in range(1,r+1):
        f = f * i
        sum = sum + f
        m = int(m/10)
if sum == num:
    print("krishnamurti number is: ",num)
else:
    print("krishnamurti number isn't: ",num)
```

Enter a number: 432
krishnamurti number isn't: 432

In [77]:

```
14.# Write a python program to calculate sum of all numbers factorial ( Range given by user)
num = int(input("Enter a number: "))
factorial = 1
if num >= 1:
    for i in range (1, num+1):
        factorial = factorial * i
print ("Factorial of the given number is: ", factorial)
```

Enter a number: 6

Factorial of the given number is: 720

In [83]:

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15.# Calculate the sum of series 1+2+3+5+.....+N. (N given by user).
num = int(input("Enter a number: "))
sum = 0
for i in range(1,num+1):
    sum = sum+i**2
print(s)
```

Enter a number: 20

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In [86]:

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16.# Calculate the sum of series 1!+2!+3!+5!+.....+N!. (N given by user).
num = int(input("Enter a number: "))
factorial = 1
for i in range(1,num + 1):
    factorial = factorial*i
print("The factorial of",num,"is",factorial)
```

Enter a number: 6

The factorial of 6 is 720

In [88]:

```
17.# Write a python program to print fibonacci series.
num = int(input("Enter a number: "))
x = 0
y = 1
z = 0
for i in range(num):
    print(z,end = " ")
    x = y
    y = z
    z = x + y
```

Enter a number: 10

0 1 1 2 3 5 8 13 21 34

In [91]:

```
18.# Calculate HCF and LCM of two number.
x = int(input("Enter a number: "))
y = int(input("Enter another number: "))
if x > y:
    x, y = y, x
for i in range(1,x+1):
    if x%i == 0 and y%i == 0:
        hcf = i
        lcm = (x*y)/hcf
print("LCM of", x, "and", y, "is:", lcm)
```

Enter a number: 20
Enter another number: 10
LCM of 10 and 20 is: 20.0

In [92]:

```
19.# Calculate the sum of series 1^2+2^2+3^2+....+n^2
num = int(input("Enter a number: "))
for i in range(1,num+1):
    print(i^2,end = " ")
```

Enter a number: 6
3 0 1 6 7 4

In [95]:

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20.# Calculate the sum of series 1^3+2^3+3^3+5^3+.....+N^3.(N given by user).
num = int(input("Enter a number: "))
for i in range(1,num + 1):
    print(i^3,end = " ")
```

Enter a number: 4
2 1 0 7

In [100]:

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21.# Calculate sum of all even and odd numbers 1 to 15 and print sum of even numbers and od
maximum = int(input("Enter the Maximum Value : "))
even_total = 0
odd_total = 0
for number in range(1, maximum + 1):
    if(number % 2 == 0):
        even_total = even_total + number
    else:
        odd_total = odd_total + number
print("The Sum of Even Numbers from 1 to {0} = {1}".format(number, even_total))
print("The Sum of Odd Numbers from 1 to {0} = {1}".format(number, odd_total))
```

Enter the Maximum Value : 15
The Sum of Even Numbers from 1 to 15 = 56
The Sum of Odd Numbers from 1 to 15 = 15

In [103]:

```
22.# Calculate the sum of series 1+3+5+7+9+11
num = 11
sum = 0
for i in range(1,11+1):
    sum = sum+i**2
print(s)
```

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