In [3]:
```
#binary to decimal
def BinaryToDecimal(binary):
    decimal = 0
    for digit in binary:
        decimal = decimal*2 + int(digit)
    print("The decimal value is:", decimal)

binary = input("Enter a binary number:")
BinaryToDecimal(binary)
```

```
Enter a binary number:101
The decimal value is: 5
```

In [7]:
```
# fibbonacci for N numbers
n = int(input('Enter : '))
fibo_nums = [0,1]
i=1
if(n==1 or n==2):
    print(n,'th Prime Number is :',fibo_nums[n-1])
    print('Fibonacci Series :', fibo_nums)
elif(n>2):
    while (True):
        fib = fibo_nums[i-1]+fibo_nums[i]
        fibo_nums.append(fib)
        if(len(fibo_nums)==n):
            break
        else:
            i+=1
    print(n,'th Fibonacci Number is :', fibo_nums[n-1])
    print('Fibonacci Series is :', fibo_nums)
else:
    print('Please Enter A Valid Number')
```

```
Enter : 5
5 th Fibonacci Number is : 3
Fibonacci Series is : [0, 1, 1, 2, 3]
```

In [8]:
```
#multiplication of table k
num = int(input("Enter the number: "))

print("Multiplication Table of", num)
for i in range(1, 11):
   print(num,"X",i,"=",num * i)
```

```
Enter the number: 7
Multiplication Table of 7
7 X 1 = 7
7 X 2 = 14
7 X 3 = 21
7 X 4 = 28
7 X 5 = 35
7 X 6 = 42
7 X 7 = 49
7 X 8 = 56
7 X 9 = 63
7 X 10 = 70
```

In [13]:
```
#take 10 integers and print average of them
sum=0
i=10
while i>0:
    print("enter number")
    num =int(  input())
    sum = sum + num
    i= i-1
print("average is ",sum/10.0)
```

```
enter number
10
enter number
56
enter number
45
enter number
54
enter number
```

```
54
enter number
541
enter number
45
enter number
14
enter number
45
enter number
45
average is  90.9
```

In [14]:
```
#printing pattren
i=1
while i<=4:
    print("*"*i)
    i=i+1
```

```
*
**
***
****
```

In [16]:
```
#Write a program to find greatest common divisor (GCD) or highest commo
n factor (HCF) of given two numbers.
x=int(input("enter x="))
y=int(input("enter y="))
while y!=0:
    x,y=y,x%y
print (x)
```

```
enter x=10
enter y=20
10
```

In [17]:
```
word = input("Input a word to reverse: ")
```

```
for char in range(len(word) - 1, -1, -1):
  print(word[char], end="")
print("\n")
```

```
Input a word to reverse: hi
ih
```

In [18]:
```
numbers = (1, 32, 37, 11, 75, 64, 70, 89, 93) # Declaring the tuple
count_odd = 0
count_even = 0
for x in numbers:
        if not x % 2:
             count_even+=1
        else:
             count_odd+=1
print("Number of even numbers :",count_even)
print("Number of odd numbers :",count_odd)
```

```
Number of even numbers : 3
Number of odd numbers : 6
```

In [19]:
```
for x in range(6):
    if (x == 3 or x==6):
        continue
    print(x,end=' ')
print("\n")
```

```
0 1 2 4 5
```

In [20]:
```
def string_length(str1):
    count = 0
    for char in str1:
        count += 1
    return count
print(string_length('GITAM school of technology'))
```

```
26
```

In [21]:
```
def char_frequency(str1):
    dict = {}
    for n in str1:
        keys = dict.keys()
        if n in keys:
            dict[n] += 1
        else:
            dict[n] = 1
    return dict
print(char_frequency('GITAM school of technology'))
```

```
{'G': 1, 'I': 1, 'T': 1, 'A': 1, 'M': 1, ' ': 3, 's': 1, 'c': 2, 'h':
2, 'o': 5, 'l': 2, 'f': 1, 't': 1, 'e': 1, 'n': 1, 'g': 1, 'y': 1}
```

In [23]:
```
def chars_mix_up(a, b):
  new_a = b[:2] + a[2:]
  new_b = a[:2] + b[2:]

  return new_a + ' ' + new_b
print(chars_mix_up('alter', 'nate'))
```

```
nater alte
```

In [25]:
```
user_input = input("enter the word ")
print("My input in upper case ", user_input.upper())
print("My input in lower case ", user_input.lower())
```

```
enter the word keerthana
My input in upper case  KEERTHANA
My input in lower case  keerthana
```

In [28]:
```
str1='module 3 chapter 2\n'
print(str1)
print(str1.rstrip())
```

```
module 3 chapter 2

module 3 chapter 2
```

In [30]:
```
str1 = 'clean clams crammed in clean cans.'
print()
print(str1.count("clean"))
print()
```

```
2
```

In [31]:
```
str1 = "You-can-tell-people-you-are-new-with-this-sentence.."
print(str1.split('-'))
```

```
['You', 'can', 'tell', 'people', 'you', 'are', 'new', 'with', 'this',
'sentence..']
```

In [35]:
```
test_str = "technology"

print ("The original string is : " + test_str)
new_str = ""

for i in range(len(test_str)):
    if i != 2:
        new_str = new_str + test_str[i]


print ("The string after removal of i'th character : " + new_str)
```

```
The original string is : technology
The string after removal of i'th character : tehnology
```

In [41]:
```
a=input()
for i in a:
    print (i)
```

```
technology
t
e
c
h
```

```
n
o
l
o
g
y
```

In [43]:
```
a='refrigerator'
count=0
for i in a:
    count =count+1
print(count)
```

```
12
```

In [ ]:
```

```