In [15]:
```
#1. Convert Binary number to decimal
num=int(input("enter a binary number: "))
sum=0
i=0
while num!=0:
    rem=num%10
    sum=sum+rem*pow(2,i)
    num=int(num/10)
    i=i+1
print("decimal number= ",sum)
```

```
enter a binary number: 1011
decimal number=  11
```

In [16]:
```
#2. Generate first N number of Fibonacci numbers. Take N value from user
nterms = int(input("enter the n value "))
n1, n2 = 0, 1
count = 0
if nterms <= 0:
   print("Please enter a positive integer")
elif nterms == 1:
   print("Fibonacci sequence upto",nterms,":")
   print(n1)
else:
   print("Fibonacci sequence:")
   while count < nterms:
       print(n1)
       nth = n1 + n2
       n1 = n2
       n2 = nth
       count += 1
```

```
enter the n value 5
Fibonacci sequence:
0
1
1
2
3
```

In [17]:
```
#3. Display multiplication table of K. Take k value from user
   #Ex: 7 x 1 =7
     #7 x 2 = 14 .....
num = 7
for i in range(1, 11):
   print(num, 'x', i, '=', num*i)
```

```
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 [1]:
```
#4A.Take 10 integers from keyboard using loop and print their average value on the screen Pr
int the   following patterns using loop :
add=0
for i in range(1,11):
    n=int(input('value is: '))
    add=add+n
print(add/10)
```

```
value is: 4
value is: 4
value is: 4
value is: 4
value is: 4
value is: 4
value is: 4
value is: 4
value is: 4
value is: 4
4.0
```

In [4]:
```
#4B.program to print pattern
#   *
#   * *
#   * * *
#   * * * *
rows=4
for i in range(0,rows):
    for j in range(0,i+1):
        print('*',end='')
    print('\r')
```

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

In [1]:
```
#5.Write a program to find greatest common divisor (GCD) or highest common factor (HCF) of g
iven two numbers.
a = float(input(" Please Enter the First Value a: "))
b = float(input(" Please Enter the Second Value b: "))
i = 1
while(i <= a and i <= b):
    if(a % i == 0 and b % i == 0):
        gcd = i
    i = i + 1
print("\n HCF of {0} and {1} = {2}".format(a, b, gcd))
```

```
 Please Enter the First Value a: 81
 Please Enter the Second Value b: 153

 HCF of 81.0 and 153.0 = 9
```

In [20]:
```
#6.program that accepts a word from the user and reverse it
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: python
nohtyp
```

In [21]:
```
#7.program to count the number of even and odd numbers from a series of numbers
numbers = (1, 2, 3, 4, 5, 6, 7, 8, 9)
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 : 4
Number of odd numbers : 5
```

In [23]:
```
#8.Write a Python program that prints all the numbers from 0 to 6 except 3 and 6.
for x in range(6):
    if (x == 3 or x==6):
        continue
    print(x,end=' ')
print("\n")
```

```
0 1 2 4 5
```

In [ ]: