In [1]:
```
#program to convert binary number to decimal
b_num = list(input("Input a binary number: "))
value = 0
for i in range(len(b_num)):
    digit = b_num.pop()
    if digit == '1':
     value = value + pow(2, i)
print("The decimal value of the number is", value)
```

```
Input a binary number: 1000001
The decimal value of the number is 65
```

In [2]:
```
# Program to display the Fibonacci numbers
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 7
Fibonacci sequence:
0
1
1
2
3
5
8
```

In [3]:
```
# program to display multiplication table
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 [5]:
```
# Python Program to find GCD or HCF of 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: 12
 Please Enter the Second Value b: 20

 HCF of 12.0 and 20.0 = 4
```

In [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: computer
retupmoc
```

In [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 [8]:
```
# program to print 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 [2]:
```
#4a Take 10 integers from keyboard using loop and print their average value
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 [3]:
```
#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 [ ]:
```

```