

```
In [1]: #1.convert binary number to decimal
num=int(input("enter any 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 any binary number10123
decimal number : 27
```

```
In [2]: #2.Generate first N number of fibonacci numbers.takw 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 [3]: #3.Display multiplication table of K .take k value from user
num=int(input("enter a number"))
for i in range(1, 11):
    print(num, 'x', i, '=', num*i)
```

```
enter a number15
15 x 1 = 15
15 x 2 = 30
15 x 3 = 45
15 x 4 = 60
15 x 5 = 75
15 x 6 = 90
15 x 7 = 105
15 x 8 = 120
15 x 9 = 135
15 x 10 = 150
```

```
In [4]: #4A.Take 10 integers from keyboard using loop and print their average v
       alue on the screen
       #4Bprint 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:1
value is:2
value is:3
value is:4
value is:5
value is:6
value is:7
value is:8
```

```
value is:8
value is:9
value is:2
4.7
```

In [10]: *#4B.Program to print pattern*

```
# *
# * *
# * * *
# * * * *
rows=4
for i in range(0,rows):
    for j in range(0,i+1):
        print('*',end='')
    print('\n')
```

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

In [11]: *#5.write a program to find the gretest common divisor(GCD) or highest c ommon factor(HCF) of given 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: 67
Please Enter the Second Value b: 90
```

```
HCF of 67.0 and 90.0 = 1
```

In [12]: *#6.Write a Python 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: huthika
akihtuh

In [13]: *#7. Write a Python program to count the number of even and odd numbers from a series of numbers.*

```
numbers = (10, 12, 13, 14, 15, 16, 17, 18, 19)
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 : 5
Number of odd numbers : 4

In [14]: *#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 []:

