

## chapter 1

In [8]:

```
#1.Convert Binary number to decimal
bi=input('enter the binary number :')
decimal=0
for i in bi:
    decimal=(decimal*2)+int( i)
print('decimal number',decimal)
```

```
enter the binary number :111
decimal number 7
```

In [8]:

```
#2. Generate first N number of Fibonacci numbers. Take N value from user
ran = int(input('Enter : '))
fib = [0,1]
i=1
if(ran==1 or ran==2):
    print('Fibonacci Series :', fib)
elif(ran>2):
    while (True):
        f = fib[i-1]+fib[i]
        fib.append(f)
        if(len(fib)==ran):
            break
        else:
            i+=1
    print('Fibonacci Series is :', fib)
else:
    print('Please Enter A Valid Number')
```

```
Enter : 9
Fibonacci Series is : [0, 1, 1, 2, 3, 5, 8, 13, 21]
```

In [4]:

```
#3.Display multiplication table of K. Take k value from user.
k=int(input('enter the table number: '))
print(k,'multiplication table is')
for i in range(1,11):
    c=k*i
    print(k,'*',i,'=',c)
```

```
enter the table number: 5
5 multiplication table is
5 * 1 = 5
5 * 2 = 10
5 * 3 = 15
5 * 4 = 20
5 * 5 = 25
5 * 6 = 30
5 * 7 = 35
5 * 8 = 40
5 * 9 = 45
5 * 10 = 50
```

In [5]:

```
#4.take 10 integers from keyboard using loop and print their average value on the screen
print('enter 10 number')
s=0
for i in range(1,11):
    k=float(input())
    s+=k
a=s/10
print('avg value is: ',a)
```

```
enter 10 number
1
3
5
7
9
2
11
15
30
33
avg value is:  11.6
```

In [7]:

```
#4(b).pattern
print('pattern:\n')
for i in range(1,5):
    print('*'*i)
```

```
pattern:

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

In [11]:

```
#5.Write a program to find greatest common divisor (GCD) or highest common factor (HCF) of g
iven two numbers
x = int(input("Enter first number: "))
y = int(input("Enter second number: "))
if x > y:
    smaller = y
else:
    smaller = x
for i in range(1,smaller + 1):
    if((x % i == 0) and (y % i == 0)):
        hcf = i
print("The H.C.F. of", x,"and", y,"is", hcf)
```

```
Enter first number: 98
Enter second number: 84
The H.C.F. of 98 and 84 is 14
```

In [13]:

```
#6.Write a Python program that accepts a word from the user and reverse it
s=input('enter the word ')
r=s[::-1]
print('reverse word:\n',r)
```

```
enter the word gitam
reverse word:
matig
```

In [15]:

```
#7.Write a Python program to count the number of even and odd numbers from a series of numbe
rs.
num=(1,3,2,6,9,12,3,8,33)
counto=0
counte=0
for i in num:
    if(i%2==0):
        counte+=1
    else:
        counto+=1
print('LIST: ',num)
print('number of even numbers in the list: ',counte)
print('number of odd numbers in the list: ',counto)
```

```
LIST:  (1, 3, 2, 6, 9, 12, 3, 8, 33)
number of even numbers in the list:  4
number of odd numbers in the list:  5
```

In [16]:

```
#8.Write a Python program that prints all the numbers from 0 to 6 except 3 and 6.
print('numbers:')
for i in range(0,6):
    if(i!=3):
        print(i)
```

```
numbers:
0
1
2
4
5
```

## chapter 2

In [20]:

```
#1.Write a Python program to calculate the length of a string.
string=input('enter the string: ')
count = 0
for c in string:
    count += 1
print('length of string= ',count)
```

```
enter the string: hello bengaluru
length of string=  15
```

In [21]:

```
#2.Write a Python program to count the number of characters (character frequency) in a strin
g.
string=input('enter the string: ')
dict = {}
for n in string:
    keys = dict.keys()
    if n in keys:
        dict[n] += 1
    else:
        dict[n] = 1
print(dict)
```

```
enter the string: gitam university
{'g': 1, 'i': 3, 't': 2, 'a': 1, 'm': 1, ' ': 2, 'u': 1, 'n': 1, 'v': 1, 'e': 1, 'r': 1, 's':
1, 'y': 1}
```

In [23]:

```
#3.Write a Python program to get a single string from two given strings,
#sparated by a space and swap the first two characters of each string
a=input('enter the first string ')
b=input('enter the second string')
na = b[:2] + a[2:]
nb = a[:2] + b[2:]
print(na ,'\t ',nb)
```

```
enter the first string hello
enter the second stringworld
wollo      herld
```

In [25]:

```
#4.Write a Python script that takes input from the user and displays that input back in uppe
r and lower cases
a= input("enter the string ")
print("My input in upper case ", a.upper())
print("My input in lower case ", a.lower())
```

```
enter the string BengalurU
My input in upper case  BENGALURU
My input in lower case  bengaluru
```

In [27]:

```
#5.Write a Python program to remove a newline in Python.
string=input('enter a string ')
print(string)
print(string.rstrip())
```

```
enter a string hello university
hello university
hello university
```

In [34]:

```
#6.Write a Python program to count occurrences of a substring in a string.
string = 'road is a road is a road'
print()
print(string.count("road"))
print()
```

```
3
```

In [32]:

```
#7.Write a Python program to convert a string in a list.
string = input('enter the string ')
print(string.split(','))
```

```
enter the string gitam,university,bengaluru,hyderabad,visakatnam
['gitam', 'university', 'bengaluru', 'hyderabad', 'visakatnam']
```

In [37]:

```
#8.Write a Python program to perform Deletion of a character
string = "university"
print ("The original string : " +string)
nstr = ""
for i in range(len(string)):
    if i != 4:
        nstr = nstr + string[i]
print ("The string after removal of character e : " ,nstr)
```

```
The original string : university
The string after removal of character e :  univrslty
```

In [38]:

```
#9.Write a program to print every character of a string entered by user in a new line using
loop.
a=input('enter a string: ')
print('string characters: ')
for i in a:
    print(i)
```

```
enter a string: university
string characters:
u
n
i
v
e
r
s
i
t
y
```

In [41]:

```
#10.Write a program to find the length of the string "refrigerator" without using len functi
on.
string='refrigerator'
count=0
for i in string:
```