python practical-3 Functions in python

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```
[1]: def add(a,b):
         c=a+b
         print(c)
[2]: add(3,4)
    7
[3]: add(6.7,8.9)
    15.600000000000001
[4]: add(7.4673523,8.765564)
    16.2329163
[6]: def add1(n):
         add=0
         for x in n:
             add=add+x
         print("addition of list",add)
[7]: 1=[6.7,9.5,3.9,38,46,94,39,1,7]
     add1(1)
    addition of list 245.1
```

- 1 create a function which calculates area of triangle.
- 2 Create a function which calculate the factorial of given number using a function

```
[8]: def fact(n):
    if(n==1):
        return n
    else:
        return n*fact(n-1)
```

```
[9]: fact(9)
 [9]: 362880
[13]: d=int(input("Enter value:"))
      if(d==0):
          print("Factorial of 0 is 1")
      elif(d<0):
          print("please enter positive number as factorial does not exist of negative∟
      →number")
      else:
          print("Factorial of",d,"is",fact(d))
     Enter value:9
     Factorial of 9 is 362880
     3 0,1,1,2,3,5,8,13,.....
[14]: def fibb(n):
          if(n<=1):
              return n
          else:
              return (fibb(n-1)+fibb(n-2))
[15]: b=int(input("enter value"))
      if(b<=0):
          print("please enetr positive value")
      else:
          print("fibbonacci series of", b)
          for x in range(b):
              print(fibb(x))
     enter value15
     fibbonacci series of 15
     0
     1
     1
     2
     3
     5
     8
     13
     21
     34
     55
     89
     144
```

4 SWAP 2 int numbers using function

5 Create a function which returns square of the number

```
[2]: def fact(n):
          if(n<0):
              print("Please enter positive number as factorial does not exist for⊔
       →negative number")
          elif(n==0):
              print("factorial of 0 is 1")
          elif(n==1):
              return n
          else:
              return n*fact(n-1)
 [3]: fact(5)
 [3]: 120
[20]: def fibb(n):
          if(n<=1):
              return n
          else:
              print("fibbonacci series of",n,"is")
              for x in n:
                  print(x)
                  return (fibb(x-1)+fibb(x-2))
 []:
 []: x="my name is nisha"
      if(x)
```