```
In [1]:
         1 ## task -17 functions
          2 # A function is a block of code which only runs when it is call
          3
             def func():
                print('this is function')
            func()
         this is function
In [5]:
          1 def func(a,b):
               print('this is function',a,b)
            func(15,20)
        this is function 15 20
In [15]:
          1 ## * is arg(argument) , * use for tuple
          2
          3 def func(*a):
                print('function',a)
          5 func(25,26,'hai')
        function (25, 26, 'hai')
          1 def func(**a):
In [19]:
                            # ** uses for dictionary
          print('function',a)
          3 func(vehicle='bus',cost=200)
        function {'vehicle': 'bus', 'cost': 200}
In [28]:
          2 def func(a,b=2,c=3):
          print('this is func',a,b,c)
          4 func(1,2,3)
          5 func(1,2)
          6 func(1)
        this is func 1 2 3
        this is func 1 2 3
         this is func 1 2 3
```

```
In [50]:
          1 def outer():
                 print('this is outer')
               def inner():
                     print('this is inner')
                 inner()
           6 outer()
         this is outer
         this is inner
          1 def add(a,b):
In [39]:
                 return a+b
           3 add(8,5)
Out[39]: 13
In [40]:
            def sub(a,b):
                 return a-b
           3 sub(15,9)
Out[40]: 6
In [65]:
          1 def mul(a,b):
                 return a*b
           3 mul(8,5)
Out[65]: 40
In [66]:
          1 def div(a,b):
                 return a/b
           3 div(8,5)
Out[66]: 1.6
```