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Assignment – write the output
1.
def a_fun():
        global name
         name = 'A'
def b_fun():
        global name
        name = 'B'
b_fun()
a_fun()
print (name)
# output= A
2.
a = 10
def f():
        print ('Inside f() : ', a)
def g():
        a = 20
        print ('Inside g() : ',a)
def h():
        global a
        a = 30
        print ('Inside h() : ',a)
print ('global : ',a)
f()
print ('global : ',a)
g()
print ('global : ',a)
h()
print ('global : ',a)
```

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# output:
 # Inside g(): 10
 # global : 10
 # Inside f(): 10
 # global : 10
 # global : 10
 # Inside h(): 30
 # global:30
3.
a_var = 10
b_var = 15
e_var = 25
d_var = 100
def a_func(a_var):
       print("in a_func a_var =", a_var)
       b_var = 100 + a_var
       d_var = 2 * a_var
       print("in a_func b_var =", b_var)
       print("in a_func d_var =", d_var)
       print("in a_func e_var =", e_var)
        return b_var + 10
c_var = a_func(b_var)
print("a_var =", a_var)
print("b_var =", b_var)
print("c_var =", c_var)
print("d_var =", d_var)
 # OUTPUT
 in a_func a_var = 15
 in a_func b_var = 115
 in a_func d_var = 30
 in a_func e_var = 25
 a_var = 10
 b var = 15
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c_var = 125
 d_var = 100
4.
a,b,x,y = 1,15,3,4
def fun(x, y):
        global a
        a = 42
       x,y = y,x
        b = 33
        b = 17
        c = 100
        print (a,b,x,y)
fun(17,4)
print (a,b,x,y)
 # OUTPUT
 42 17 4 17
 42 15 3 4
5.
def f():
        x = 42
        def g():
                global x
                x = 43
        print("Before calling g: ",x)
        g()
        print("After calling g: ",x)
```

```
f()
print("x in main: " ,x)
 # output:
 """before calling g: 42
 after calling g: 42
 x in main: 43
 ....
6.
def outer():
       s="Ludhiana"
       def inner1():
               s="punjab"
       def inner2():
               nonlocal s
               s="Chandigarh"
       def inner3():
               global s
               s="Haryana"
       print(s)
       inner1()
       print(s)
       inner2()
       print(s)
       inner3()
       print(s)
outer()
print(s)
 # OUTPUT:
 Ludhiana
```

Ludhiana

```
Chandigarh
 Chandigarh
 Haryana
 ....
7.
eid,ename,esal=1,'aaa',10000.56
def emp(eid,ename,esal):
        globals()['eid']=eid
        globals()['ename']=ename
        globals()['esal']=esal
print(eid,ename,esal)
def disp():
        print(eid,ename,esal)
emp(111, 'ratan', 10000.45)
disp()
print(eid,ename,esal)
   # OUTPUT
   ....
   1 aaa
   10000.56
   111 ratan
   10000.45
   111 ratan
   10000.45"""
8.
a,b=100,200
class MyClass():
        a,b=10,20
        def add(self,a,b):
                print(a+b)
                print(globals()['a']+globals()['b'])
                print(self.a+self.b)
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def mul(self,a,b):
               print(a*b)
               print(globals()['a']+globals()['b'])
               print(self.a*self.b)
c = MyClass()
c.add(3,3)
c.mul(4,4)
 # output:
 6
 300
 30
 16
 300
 200"""
9.
class Emp:
       def __init__(self,eid,ename,esal):
               self.eid=eid
                self.ename=ename
               self.esal=esal
       def __str__(self):
               return "emp id=%d Emp name=%s Emp sal=%g"%(self.eid,self.ename,self.esal)
e1 = Emp(111,"kamal",100000.45)
print(e1)
e2 = Emp(111,"anu",200000.46)
print(e2)
class Test:
  @staticmethod
  def static_method_1():
    print('static method 1')
  @staticmethod
```

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def static_method_2():
    Test.static_method_1()
    @classmethod
    def class_method_1(cls):
        cls.static_method_2()

# call class method
Test.class_method_1()
        # output:
        """
        emp id=111 Emp name=kamal Emp sal=100000
        emp id=111 Emp name=anu Emp sal=2000000
```