#....................using simple class

class user:

    name=''

    email=''

    password=''

    login=True

    def login(self):

        email=input('enter your email:')

        password=input('enter your password:')

        if email==self.email and password==self.password:

            login=True

            print('login successful')

        else:

            print('login fail')

    def logout(self):

        login=False

        print('logout')

    def isLoggedIn(self):

        if self.login:

            return True

        else:

            return False

    def profile(self):

        if self.isLoggedIn():

            print(self.name,"/", self.email)

        else:

            print('user is not valied')

user1=user()

user1.name='mahmud'

user1.email='mahmudhossain835@gmail.com'

user1.password='2580'

user1.login()

user1.profile()

hello=input()

#......................using constructor

class user:

    name=''

    email=''

    password=''

    login=True

    def \_\_init\_\_ (self,name,email,password):

        self.email=email

        self.name=name

        self.password=password

    def login(self):

        email=input('enter your email:')

        password=input('enter your password:')

        if email==self.email and password==self.password:

            login=True

            print('login successful')

        else:

            print('login fail')

    def logout(self):

        login=False

        print('logout')

    def isLoggedIn(self):

        if self.login:

            return True

        else:

            return False

    def profile(self):

        if self.isLoggedIn():

            print(self.name,"/", self.email)

        else:

            print('user is not valied')

user1=user('mahmud','mahmudhossain835@gmail.com','2580')

user1.login()

user1.profile()

hello=input()

#.................................

class lol:

    name=''

    roll=''

    city=''

    def fun1(self):

        print('hi i am ',self.name,'roll is ',self.roll)

    def fun2(self,city):

        print('my city is:',city)

s=lol()

s.name='lamyaa'

s.roll=1222

s.fun1()

s.fun2('pabna')

#............................

class calculator:

    def sum(self,a,b):

        print('sum is:',a+b)

    def sub(self,a,b):

        print('sub is:',a-b)

    def mul(self,a,b):

        print('mul is:',a\*b)

    def div(self,a,b):

        try:

            print('div is:',a/b)

        except Exception as e:

            print(e)

lol=calculator()

lol.sum(2,2)

lol.sub(5,2)

lol.mul(2,2)

lol.div(5,0)

#.............................

class test:

    def \_\_init\_\_(self):

        print('i am constuctor')

    def fun1(self):

        print('i am funtion one')

    def fun2(self):

        print('i am funtion 2')

lol=test()

#lol.fun1()

lol.fun2()

#...............................multiple construtor call

class Hello:

    def \_\_init\_\_(self):

        print ("Constractor")

    def sayHello(self):

        print ("Hello world!")

hello1 = Hello()

hello1.sayHello()

hello2 = Hello()

hello2.sayHello()

#................

class math:

    def \_\_init\_\_(self,x,y):

        print('sum:',x+y)

lol=math(2,3)

class math:

    def \_\_init\_\_(self,x,y):

        print('sum:',x+y)

class math2(math):

    def \_\_init\_\_(self,a,b):

        print('sub:',a-b)

lol=math(2,3)

gol=math2(5,2)

gol=math(2,2)

#.....................

import math

class lol:

    def \_\_init\_\_(self,n):

        print('result:',math.tan(n))

x=lol(45)

#...........................

class person:

    def \_\_init\_\_(self,name,age,roll):

        self.name=name

        self.age=age

        self.roll=roll

        print('my bio:',name,age,roll)

lol=person('mahmud',25,12020)

#.......................

class Person:

    def \_\_init\_\_(self, name, age):

        self.name = name

        self.age = age

    def fun(self):

        print('hello '+self.name)

lol=Person('mahmud',23)

lol.fun()

#............................change any part

class Person:

    def \_\_init\_\_(self, name, age):

        self.name = name

        self.age = age

    def fun(self):

        print('hello '+self.name)

lol=Person('mahmud',23)

lol.name='hossain'

lol.fun()

#..........................

class Person:

    def \_\_init\_\_(self, name, age):

        self.name = name

        self.age = age

    def fun(self):

        print('hello '+self.name)

lol=Person('mahmud',23)

lol.name='hossain'

lol.fun()

class lol:

    def fun(self,x,y):

        print("function one",x+y)

    def \_\_init\_\_(self):

        print("inin function")

    def fun2(self):

        print("function two")

hi=lol()

hi.fun2()

hi.fun(1 ,2)

class lol:

    name=''

    roll=''

    def \_\_init\_\_(self,x,y):

        self.x=name

        self.roll=roll

s=lol('mahmud',133)

class lol:

    def \_\_init\_\_(self,cool):

        self.n=cool

    def fun(self):

        print("hell"+self.n)

x=lol("mahmjd")

x.fun()

class lol:

    def \_\_init\_\_(self,x):

        self.n=x

    def fun(self):

        print(self.n\*self.n)

s=lol(2)

s.fun(3)

import math

class lol:

    def \_\_init\_\_(self,x):

        self.n=x

    def fun(self):

        print(self.n\*self.n)

class col(lol):

    def fun2(self):

        print(math.sin(self.n))

s=col(90)

s.fun2()

class lol:

    def sum(self,x,y):

        print("reslt sum:",x+y)

    def sub(self,x,y):

        print("result sub:",x-y)

    def div(self,x,y):

        print("result dive:",x/y)

s=lol()

s.sum(2,2)

s.sub(7,3)

s.div(12,3)

#not working function

class lol:

    def \_\_init\_\_(self,x,y):

        print("sum:",x+y)

    def \_\_init\_\_(self,x,y):

        print("sub:",x-y)

s=lol(2,2)

#above function modefy

class lol:

    def \_\_init\_\_(self,x,y):

        print("sum:",x+y)

s=lol(2,2)

#use init and def with in same class value

class lol:

    def \_\_init\_\_(self,x,y):

        self.a=x

        self.b=y

    def sum(self):

        print("sum is: ",self.a+self.b)

    def sub(self):

        print("sub is: ",self.a-self.b)

s=lol(2,2)

s.sum()

s.sub()

class lol:

    def \_\_init\_\_(self,x,y):

        print("hello math")

        self.r=x

        self.r=y

    def fun(self):

        print("sum is:",self.r+self.r)

s=lol(2,2)

s.fun()

class Person:

  def \_\_init\_\_(self, name, age):

    self.name = name

    self.age = age

    print(self.name)

    print(self.age)

p1 = Person("John", 36)

print(p1.name)

#use of \_\_init\_\_ funtion

class lol:

   # name=''

   # roll=''

    #city=''

    def \_\_init\_\_(self,name,roll,city):

        self.name=name

        self.roll=roll

        self.city=city

        print("i am constructor, so run must")

    def fun(self):

        print("i am",self.name,"and my city is",self.city)

    def fun2(self):

        print("my roll is",self.roll)

sos=lol('mm','123','raj')

sos.fun()

#The str() function is used here to convert the age attribute, which is an integer, to a string,

# so you can use it in the print() function.

class Dog:

    def \_\_init\_\_(self, name, age):

        self.name = name

        self.age = age

    def bark(self):

        print("bark bark!")

    def doginfo(self):

        print(self.name + " is " + str(self.age) + " year(s) old.")

    def birthday(self):

        self.age +=1

ozzy = Dog("Ozzy", 2)

skippy = Dog("Skippy", 12)

filou = Dog("Filou", 8)

ozzy.doginfo()

skippy.doginfo()

filou.doginfo()

#Python Multiple Inheritance

class one:

    def \_\_init\_\_(self,name,roll):

        self.name=name

        self.roll=roll

class two():

    def \_\_init\_\_(self,city,country):

        self.city=city

        self.country=country

class three(one,two):

    def \_\_init\_\_(self,name,roll,city,country,board):

        self.board=board

        one.\_\_init\_\_(self,name,roll)

        two.\_\_init\_\_(self,city,country)

        print("my name:",name,"my roll:",roll,"my city:",city,"my country:",country,"board is:",board)

sos=three("mahmud,",1234,"rajshahi,","bagladesh,","dhaka")

#Python Multi-level Inheritance Example

class one:

    def fun1(self):

        print("first class")

class two(one):

    name=""

    def fun2(self):

        self.name=name

        print(self.name)

class three(one):

    roll=''

    def fun3(self):

        self.roll=roll

        print(self.roll)

class four(two,three):

    def fun4(self):

        print(self.name)

        print(self.roll)

sos=four()

sos.name="mahmud"

sos.roll=1234

#sos.fun1()

#sos.fun2()

#sos.fun3()

sos.fun4()

#

class lol:

    name=''

    roll=''

    city=''

    def fun(self):

        print('hello',self.name, 'what your age',self.roll,'where your',self.city)

s=lol()

s.name='mahmud'

s.roll=123

s.city='rajshahi'

s.fun()

class one:

    def fun1(self,id,gpa):

        self.id=id

        self.gpa=gpa

    def fun2(self,color):

        self.colo=color

class two(one):

    def fun3(self):

        print("id:",self.id,"gpa:",self.gpa,"color:",self.color)