1.co4\_1

class Rectangle:

def \_\_init\_\_(self,l,b):

self.l=l

self.b=b

self.area=self.l\*self.b

self.p=2\*(self.l+self.b)

def display(self):

print("AREA:",self.area)

print("Perimeter:",self.p)

p1=Rectangle(3,4)

p2=Rectangle(5,6)

print("REACTANGLE 1")

p1.display()

print("REACTANGLE 2")

p2.display()

if p1.area>p2.area:

print(" Rectangle with area ",p1.area,"is larger")

else:

print(" Rectangle with area ",p2.area,"is larger")

output:

Python 3.7.9 (bundled)

>>> %Run CO4\_1.py

REACTANGLE 1

AREA: 12

Perimeter: 14

REACTANGLE 2

AREA: 30

Perimeter: 22

Rectangle with area 30 is larger

>>>

2.co4\_2

class Bank:

def \_\_init\_\_(self,bal=0):

self.bal=bal

name=input("enter name:")

print("Account for",name,"is created")

def deposit(self):

amount=int(input("enter amount to deposit"))

self.bal=self.bal+amount

print("balance:",self.bal)

def withdraw(self):

amount=int(input("enter amount to withdraw"))

if(amount>self.bal):

print("Insufficient Balance!")

print("Your Remaining Balance=",self.bal)

else:

self.bal=self.bal-amount

def enquiry(self):

print("Your Balance =",self.bal)

b1= Bank()

b1.deposit()

b1.withdraw()

b1.enquiry()

output:

Python 3.7.9 (bundled)

>>> %Run co4\_2.py

enter name:ashif

Account for ashif is created

enter amount to deposit400

balance: 400

enter amount to withdraw300

Your Balance = 100

>>>

3.co4\_3

class rectangle:

def \_\_init\_\_(self,length,width):

self.\_\_length=length

self.\_\_width=width

def \_\_lt\_\_(self,a2):

area1=self.\_\_length\*self.\_\_width

area2=a2.\_\_length\*a2.\_\_width

if(area1<area2):

return(True)

else:

return(False)

print("Enter the Details of Rectangle:1")

l1=int(input("Lenght:"))

w1=int(input("width:"))

r1=rectangle(l1,w1)

print("Enter the Details of Rectangle:2")

l2=int(input("Lenght:"))

w2=int(input("width:"))

r2=rectangle(l2,w2)

if(r1<r2):

print("Rectangle 2 is larger!!")

else:

print("Rectangle 1 is larger!!")

output:

Python 3.7.9 (bundled)

>>> %Run Co4\_3.py

Enter the Details of Rectangle:1

Lenght:6

width:7

Enter the Details of Rectangle:2

Lenght:5

width:3

Rectangle 1 is larger!!

>>>

4.co4\_4

class Time:

def \_\_init\_\_(self,hour,minute,second):

self.\_\_hour=hour

self.\_\_minute=minute

self.\_\_second=second

def \_\_add\_\_(self,a2):

second=self.\_\_second+a2.\_\_second

minute=self.\_\_minute+a2.\_\_minute

hour=self.\_\_hour+a2.\_\_hour

if(second>60):

second=second-60

minute=minute+1

if(minute>60):

minute=minute-60

hour=hour+1

return hour,minute,second

print("Enter time1")

h1=int(input("hour:"))

m1=int(input("minute:"))

s1=int(input("second"))

t1=Time(h1,m1,s1)

print("Enter time2")

h2=int(input("hour:"))

m2=int(input("minute:"))

s2=int(input("second"))

t2=Time(h2,m2,s2)

hr,min,sec=t1+t2

print("overall time:",end="")

print(hr,end=":")

print(min,end=":")

print(sec,end=" ")

output:

>>> %Run co4\_4.py

Enter time1

hour:3

minute:23

second34

Enter time2

hour:4

minute:5

second7

overall time: 7:28:41

>>>

5.co4\_5:

class publisher:

def \_\_init\_\_ (self,pn):

self.publishername=pn

def display(self):

print("Publisher Name:",self.publishername)

class book(publisher):

def \_\_init\_\_ (self,pn,tt,aut):

super(). \_\_init\_\_(pn)

self.title=tt

self.author=aut

def display(self):

super().display()

print("Title Name: ",self.title)

print("Author Name:",self.author)

class python(book):

def \_\_init\_\_ (self,pn,tt,aut,pr,pg):

super(). \_\_init\_\_(pn,tt,aut)

self.price=pr

self.page=pg

def pythondisplay(self):

print("Price: ",self.price)

print("No. of Pages: ",self.page)

obj=python("joy publishers","Python","Guido van Rossum",599,230);

obj.display()

obj.pythondisplay();

Output:

>>> %Run 'co4\_5(n).py'

Publisher Name: joy publishers

Title Name: Python

Author Name: Guido van Rossum

Price: 599

No. of Pages: 230

>>>