

Co4

1. Pgm 1

class Rectangle:

```
def __init__(self, length, width):
```

```
    self.length = length
```

```
    self.width = width
```

```
def compute_area(self):
```

```
    return self.length * self.width
```

```
def compute_perimeter(self):
```

```
    return 2 * (self.length+self.width)
```

```
l= float(input('Please Enter the Length of the Rectangle: '))
```

```
w= float(input('Please Enter the Width of the Rectangle: '))
```

```
object1 = Rectangle(l,w)
```

```
area = object1.compute_area()
```

```
perimeter = object1.compute_perimeter()
```

out put

```
Python 3.7.1 Shell
File Edit Shell Debug Options Window Help
Python 3.7.1 (v3.7.1:260ec2c36a, Oct 20 2018, 14:05:16) [MSC v.1915 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: G:\whol\cc4\1-1004.py =====
Please Enter the Length of the Rectangle: 3
Please Enter the Width of the Rectangle: 4
Area of Rectangle object = 12.00
Perimeter of Rectangle object= 14.00
=====
Please Enter the Length of the Rectangle: 4
Please Enter the Width of the Rectangle: 6
Area of Rectangle object1 = 24.00
Please Enter the Length of the Rectangle2: 7
Please Enter the Width of the Rectangle2: 8
Area of Rectangle2 object2 = 56.00
Rectangle two's area is greater.
>>> |
```

2. Pgm 2

class bank:

```
    __acc_name=""
```

```
    __acc_no = ""
```

```
    __acc_type = ""
```

```
    __acc_balance = 0
```

```
def __init__(self,a_name,a_no,a_type,a_balance):
```

```
    self.__acc_name = a_name
```

```
    self.__acc_no = a_no
```

```
    self.__acc_type = a_type
```

```
    self.__acc_balance = a_balance
```

```
def deposit(self,a_deposit):
```

```
    print("Initial balance is :",self.__acc_balance)
```

```
    print("Deposit is :",a_deposit)
```

```
    self.__acc_balance += a_deposit
```

```
    print("Current balance is :",self.__acc_balance)
```

```

def withdraw(self):
    print("Current balance is :",self.__acc_balance)
    self.amount = int(input("How much amount need to withdraw : "))
    if self.amount > self.__acc_balance:
        print("You don't have enough balance to withdraw !!")
        print("Current balance is :",self.__acc_balance)
    else:
        print(self.amount," is withdrewd .")
        self.__acc_balance -= self.amount
        print("Current balance is :",self.__acc_balance)

```

```

def acc_info(self):
    print("\n\n\n\n")
    print("Account holder name : ",self.__acc_name)
    print("Account number      : ",self.__acc_no)
    print("Account type          : ",self.__acc_type)
    print("Account Balance is     : ",self.__acc_balance)
    print("\n")

```

```

def main():

    name = input("Enter Account holder name : ")
    no   = input("Enter Account number      : ")
    atype = input("Enter Account type          : ")
    bal   = int(input("Enter Account initial balance : "))
    holder = bank(name,no,atype,bal)

    while(True):
        print("\n\n\n")

```

```

opt = int(input("1)Deposit \n2)Withdraw \n3)Account info \n0)Exit\nChoose your option :: "))

print("\n\n")

if opt == 1:

    amount = int(input("Deposit amount : "))

    holder.deposit(amount)

elif opt == 2:

    holder.withdraw()

elif opt == 3:

    holder.acc_info()

elif opt == 0:

    break

else:

    print("Invalid Option !")

if __name__ == "__main__":

    while(True):

        main()

```

out put

```

Python 3.7.1 Shell
File Edit Shell Debug Options Window Help
>>>
----- RESTART: G:\whol\co4\2c04.py -----
Enter Account holder name : parvathi
Enter Account number      : 12345
Enter Account type        : saving
Enter Account initial balance : 9785

1)Deposit
2)Withdraw
3)Account info
0)Exit
Choose your option :: 1
n
Deposit amount : 56
Initial balance is : 9785
Deposit is : 56
Current balance is : 9841

1)Deposit
2)Withdraw
3)Account info
0)Exit
Choose your option :: 2
n
Current balance is : 9841
How much amount need to withdraw : 344
344 is withdrawn .
Current balance is : 9497

1)Deposit
2)Withdraw
3)Account info
0)Exit
Choose your option :: |

```

```
Python 3.7.1 Shell
File Edit Shell Debug Options Window Help

1)Deposit
2)Withdraw
3)Account info
0)Exit
Choose your option :: 3
n

Account holder name : parvathi
Account number      : 12345
Account type        : saving
Account Balance is  : 9457

1)Deposit
2)Withdraw
3)Account info
0)Exit
Choose your option :: 4
n

Invalid Option !

1)Deposit
2)Withdraw
3)Account info
0)Exit
Choose your option :: 0
n

Enter Account holder name : |
```

3. Pgm 3

class rectangle:

```
def __init__(self,length,width):
```

```
    self.length=length
```

```
    self.width=width
```

```
def __lt__(self,a1):
```

```
    area1=self.length*self.width
```

```
    area2=a1.length*a1.width
```

```
    if(area1>area2):
```

```
        return(True)
```

```
    else:
```

```
        return(False)
```

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

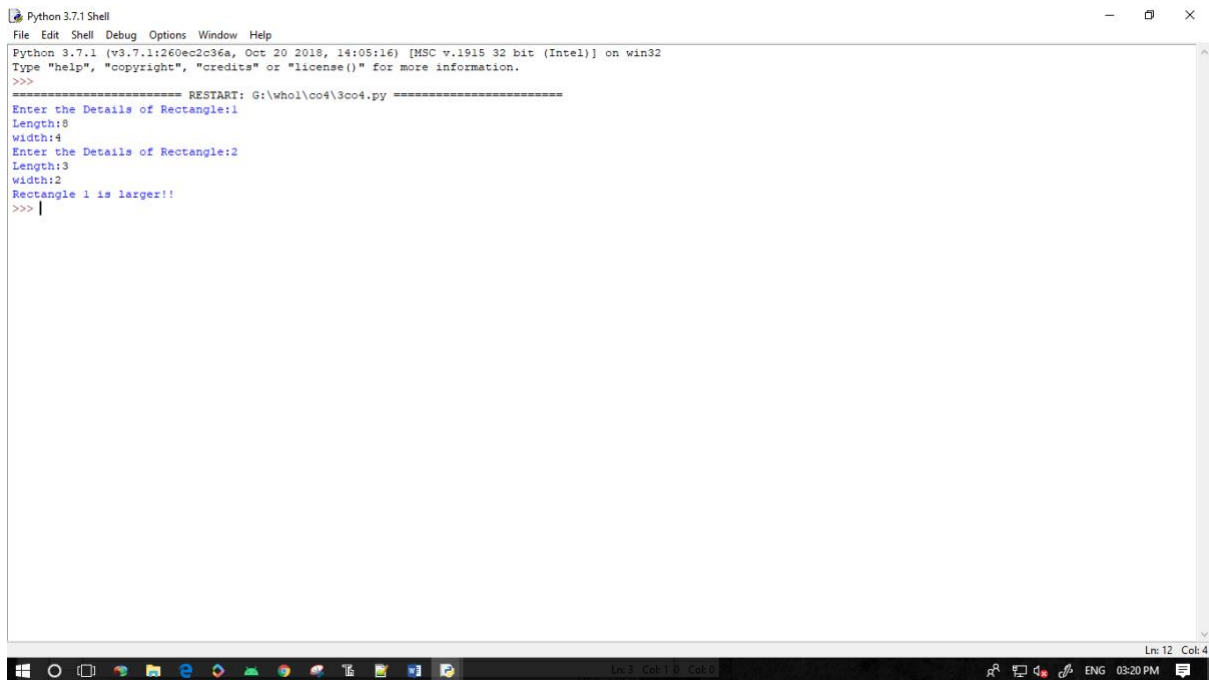
```
l1=int(input("Length:"))
```

```

w1=int(input("width:"))
r1=rectangle(l1,w1)
print("Enter the Details of Rectangle:2")
l2=int(input("Length:"))
w2=int(input("width:"))
r2=rectangle(l2,w2)
if(r1>r2):
    print("Rectangle 2 is larger!!")
else:
    print("Rectangle 1 is larger!!")

```

out put



```

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>>>
===== RESTART: G:\whol\co4\3co4.py =====
Enter the Details of Rectangle:1
Length:8
width:4
Enter the Details of Rectangle:2
Length:3
width:2
Rectangle 1 is larger!!
>>> |

```

4. Pgm 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)

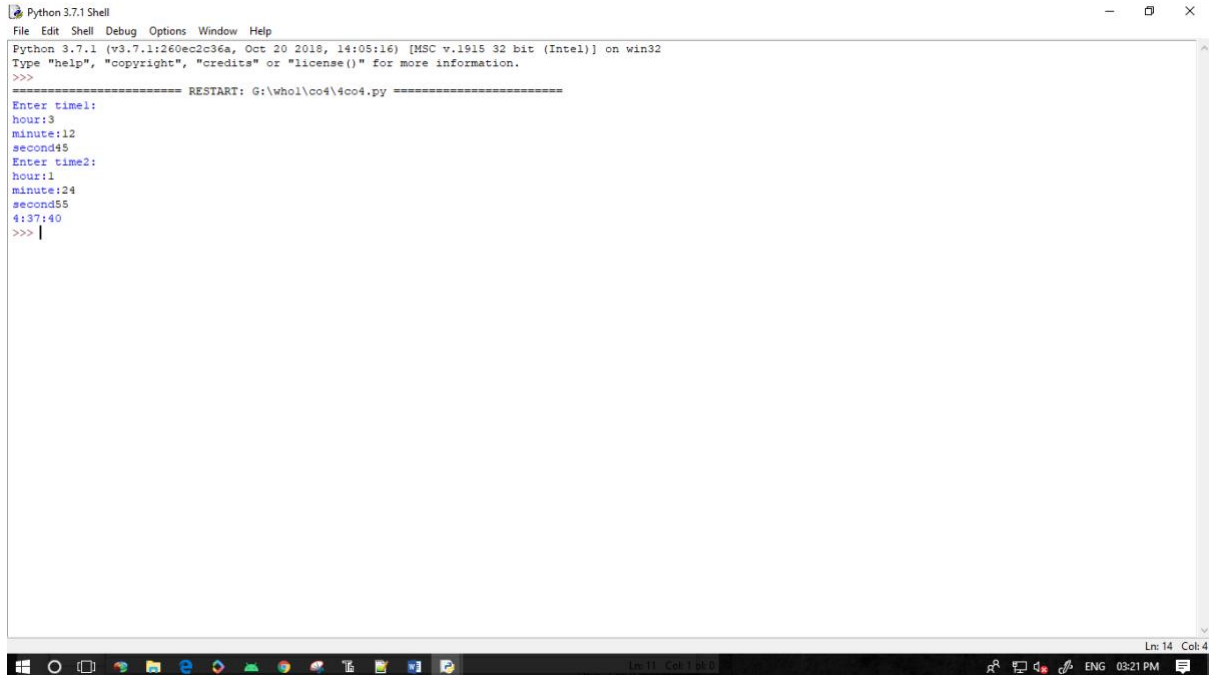
print("Enter time2:")
h2=int(input("hour:"))
m2=int(input("minute:"))
s2=int(input("second"))

t2=Time(h2,m2,s2)

hr,min,sec=t1+t2
print(hr,end=":")
print(min,end=":")
```

```
print(sec,end=" ")
```

out put



```
Python 3.7.1 Shell
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Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: G:\whol\co4\4co4.py =====
Enter time1:
hour:3
minute:12
second:45
Enter time2:
hour:1
minute:24
second:55
4:37:40
>>> |
```

5. Pgm 5

Class publisher:

```
Def getbook(self):
```

```
Self.title=input("title :")
```

```
Self.author=input("author :")
```

Class python(publisher):

```
Def getdetails(self):
```



```
Self.price=int(input("price :"))
```

```
Self.nopages=int(input("nopages :"))
```

```
Def display(self):
```

```
Print("title of the book is :",self.title)
```

```
Print("author of the book is :",self.author)
```

```
Print("price is: ",self.price)
```

```
Print("number of pages :",self.nopages)
```

```
A=python()
```

```
a.getbook()
```

```
a.getdetails()
```

```
a.display()
```

out put

```
Python 3.7.1 Shell
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Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: G:\whol\co4\co5.py =====
title :python functions
author :merak
price :98
nopages :200
title of the book is : python functions
author of the book is : merak
price is: 98
number of pages : 200
>>> |
```

Ln: 13 Col: 4