SREE NARAYANA GURU COLLEGE
An Autonomous College, Affiliated to Bharathiar University
Accredited with "A" grade by NAAC (3rd cycle) & an ISO 9001 : 2015 Certified Institution
Approved by Govt. of Tamil Nadu, & Recognized by UGC
A Premier Post Graduate and Research Co- Educational Institution
K.G. Chavadi, Coimbatore - 641105

I M.Sc. Computer Science

Practical II: PYTHON PROGRAMMING LAB (13Q)

PRACTICAL RECORD

2025-2026

DEPARTMENT OF COMPUTER SCIENCE
SREE NARAYANA GURU COLLEGE
K.G. CHAVADI, COIMBATORE – 641 105

SREE NARAYANA GURU COLLEGE

K.G. CHAVADI, COIMBATORE – 641 105

CERTIFICATE

REGISTER NUMBER

This is to certify that the bonafide record work done by _____ of I M.Sc. Computer Science in the Computer Lab of the College during the year 2025-2026.

Staff In-charge **Head of the Department**

Submitted for the End Semester Examination held on …….at Sree Narayana Guru College, Coimbatore – 641105.

Internal Examiner **External Examiner**

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PYTHON PROGRAMMING LAB

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PYTHON PROGRAMMING LAB

ProgramNo:1

Date:

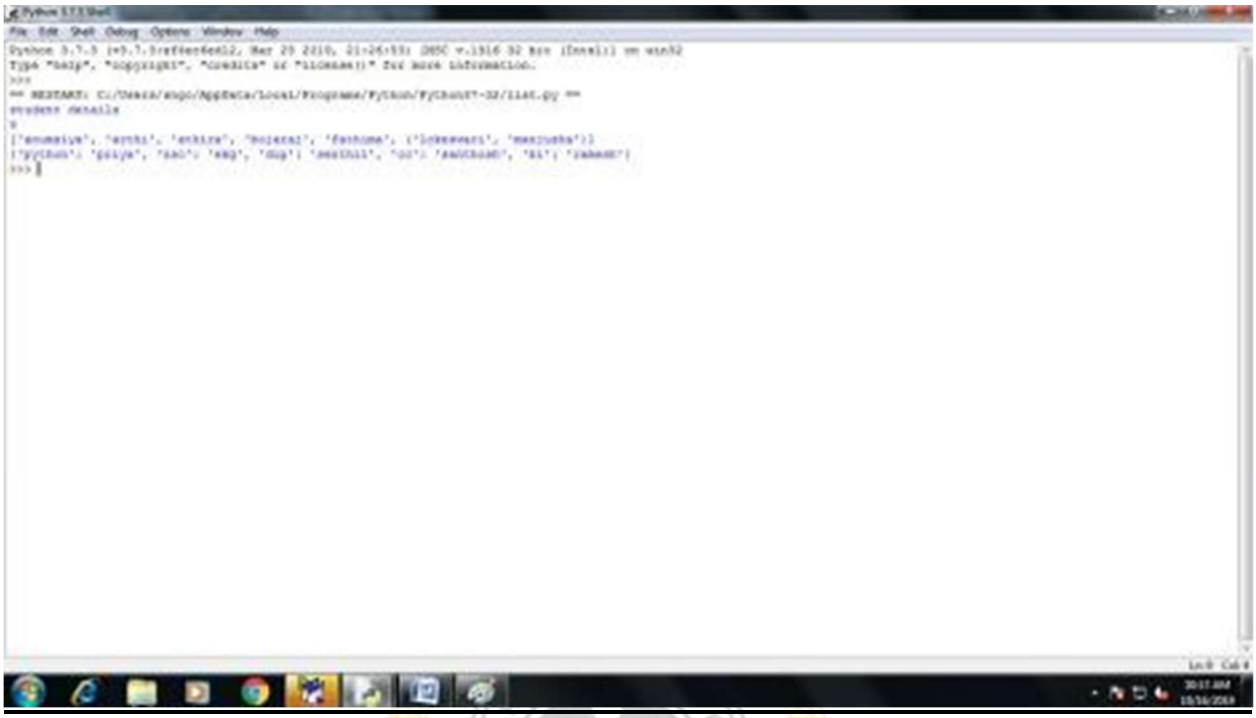
ELEMENTARY DATA ITEMS

.

SOURCE CODE:

```
print('student details')
studlist=['animasiya','arthi','athira','bojaraj','fathima']
print(len(studlist))
n=('lokeswari','manjusha')
studlist.append(n)
staff={'python':'priya','ADA':'Abdul','dip':'ramesh','c++':'Priyadarsini''} print(studlist)
print(staff)
```

OUTPUT:



ProgramNo:2

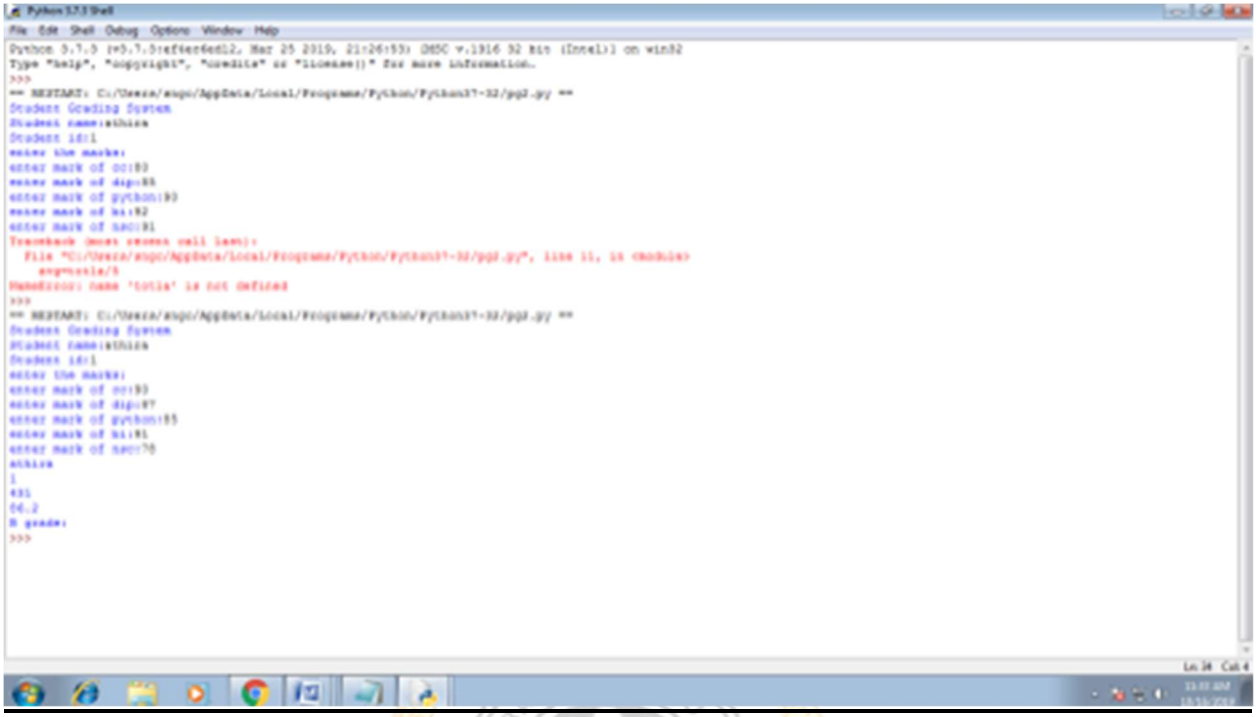
Date:

CONDITIONAL BRANCHES

SOURCE CODE:

```
print("StudentGradingSystem")
name=input("Studentname:")
id=int(input("Studentid:"))
print("enterthemarks:")
cc=int(input("entermarkofcc:"))
dip=int(input("entermarkofdip:"))
py=int(input("entermarkofpython:"))
bi=int(input("entermarkofbi:"))
nsc=int(input("entermarkofnsc:"))
total=cc+dip+py+bi+nsc
avg=total/5
print(name)
print(id)
print(total)
print(avg)
if(avg>=90):
    print("Agrade")
elif(avg>=80andavg<90):
        print("Bgrade:")
elif(avg>=70andavg<80):
            print("Cgrade")
elif(avg>=60andavg<=70):
    print("Dgrade")
else:
    print("fail")
```

OUTPUT:



ProgramNo:3

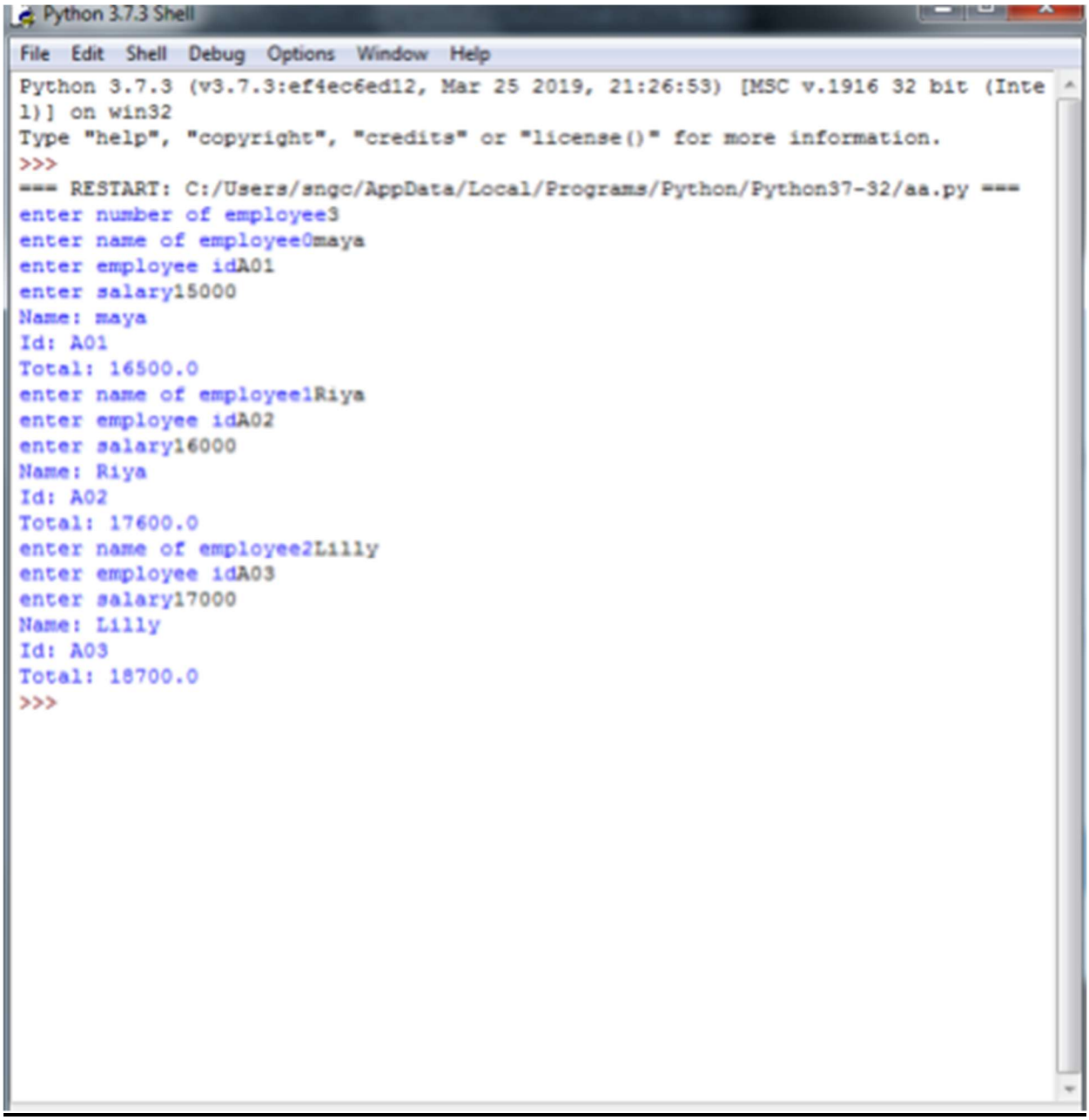
Date:

LOOPS

SOURCE CODE:

```
no_of_emp=int(input("enternumberofemployee"))
foriinrange(0,no_of_emp):
    Name=input("enternameofemployee"+str(i))
    Id=input("enteremployeeid")
    salary=int(input("entersalary"))
    incentive=salary*10/100
    Total=salary+incentive
    print("Name:",Name)
    print("Id:",Id)
  print("Total:",Total)
```

OUTPUT:


Python 3.7.3 Shell
File Edit Shell Debug Options Window Help
Python 3.7.3 (v3.7.3:ef4ec6ed12, Mar 25 2019, 21:26:53) [MSC v.1916 32 bit (Inte
l)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
=== RESTART: C:/Users/sngc/AppData/Local/Programs/Python/Python37-32/aa.py ===
enter number of employee3
enter name of employee0maya
enter employee idA01
enter salary15000
Name: maya
Id: A01
Total: 16500.0
enter name of employee1Riya
enter employee idA02
enter salary16000
Name: Riya
Id: A02
Total: 17600.0
enter name of employee2Lilly
enter employee idA03
enter salary17000
Name: Lilly
Id: A03
Total: 18700.0
>>>

ProgramNo:4

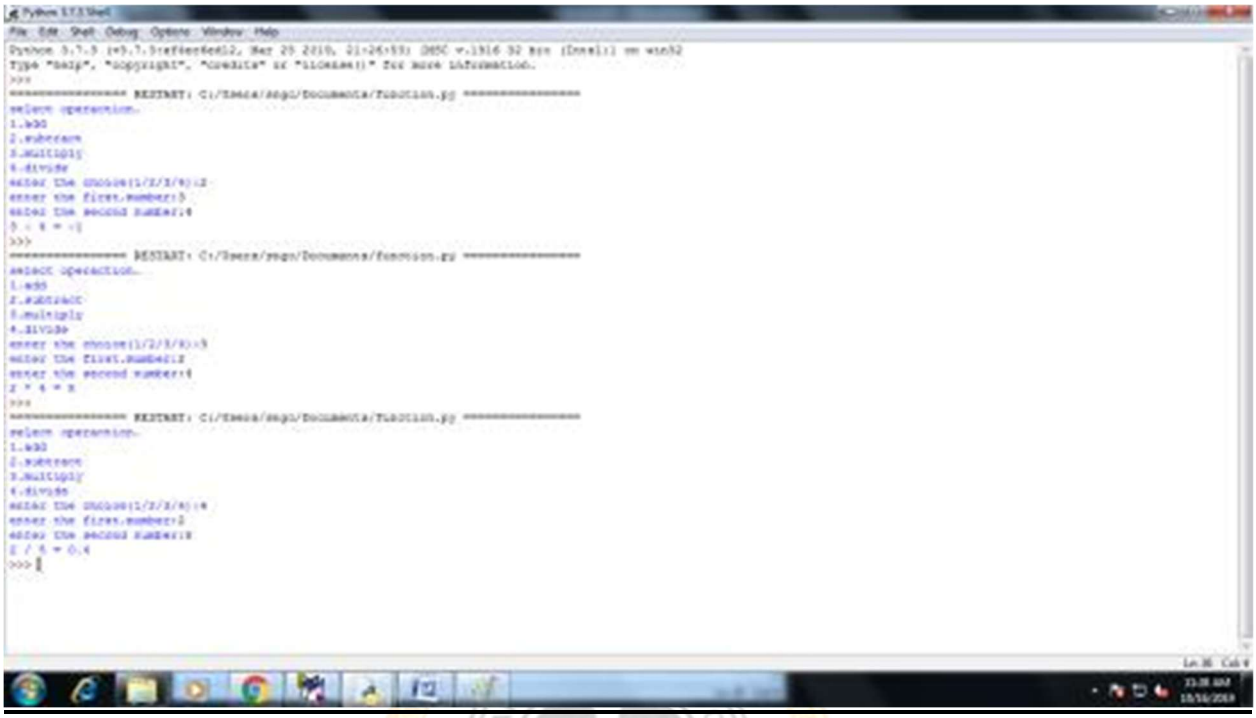
Date:

FUNCTION

SOURCE CODE:

```
defadd(x,y):
    returnx+y
defsubtract(x,y):
    returnx-y
defmultiply(x,y):
    returnx*y
defdivide(x,y):
    returnx/y
print("selectoperaction.")
print("1.add")
print("2.subtract")
print("3.multiply")
print("4.divide")
choice=input("enterthechoice(1/2/3/4):")
num1=int(input("enterthefirst.mumber:"))
num2=int(input("enterthesecondnumber:"))
ifchoice=='1':
    print(num1,"+",num2,"=",add(num1,num2))
elifchoice=='2':
    print(num1,"-",num2,"=",subtract(num1,num2))
elifchoice=='3':
    print(num1,"*",num2,"=",multiply(num1,num2))
elifchoice=='4':
    print(num1,"/",num2,"=",divide(num1,num2)) else
print("invalideinput")
```

OUTPUT:


Python 3.7.3 Shell
File Edit Shell Debug Options Window Help
Python 3.7.3 (v3.7.3:ef4ec6ed12, Mar 25 2019, 21:26:53) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: C:/Users/engi/Documents/function.py ==========
select operation.
1.add
2.subtract
3.multiply
4.divide
enter the choice(1/2/3/4):2
enter the first number:5
enter the second number:4
5 - 4 = 1
>>>
========== RESTART: C:/Users/engi/Documents/function.py ==========
select operation.
1.add
2.subtract
3.multiply
4.divide
enter the choice(1/2/3/4):3
enter the first number:2
enter the second number:4
2 * 4 = 8
>>>
========== RESTART: C:/Users/engi/Documents/function.py ==========
select operation.
1.add
2.subtract
3.multiply
4.divide
enter the choice(1/2/3/4):4
enter the first number:2
enter the second number:5
2 / 5 = 0.4
>>>

ProgramNo:5

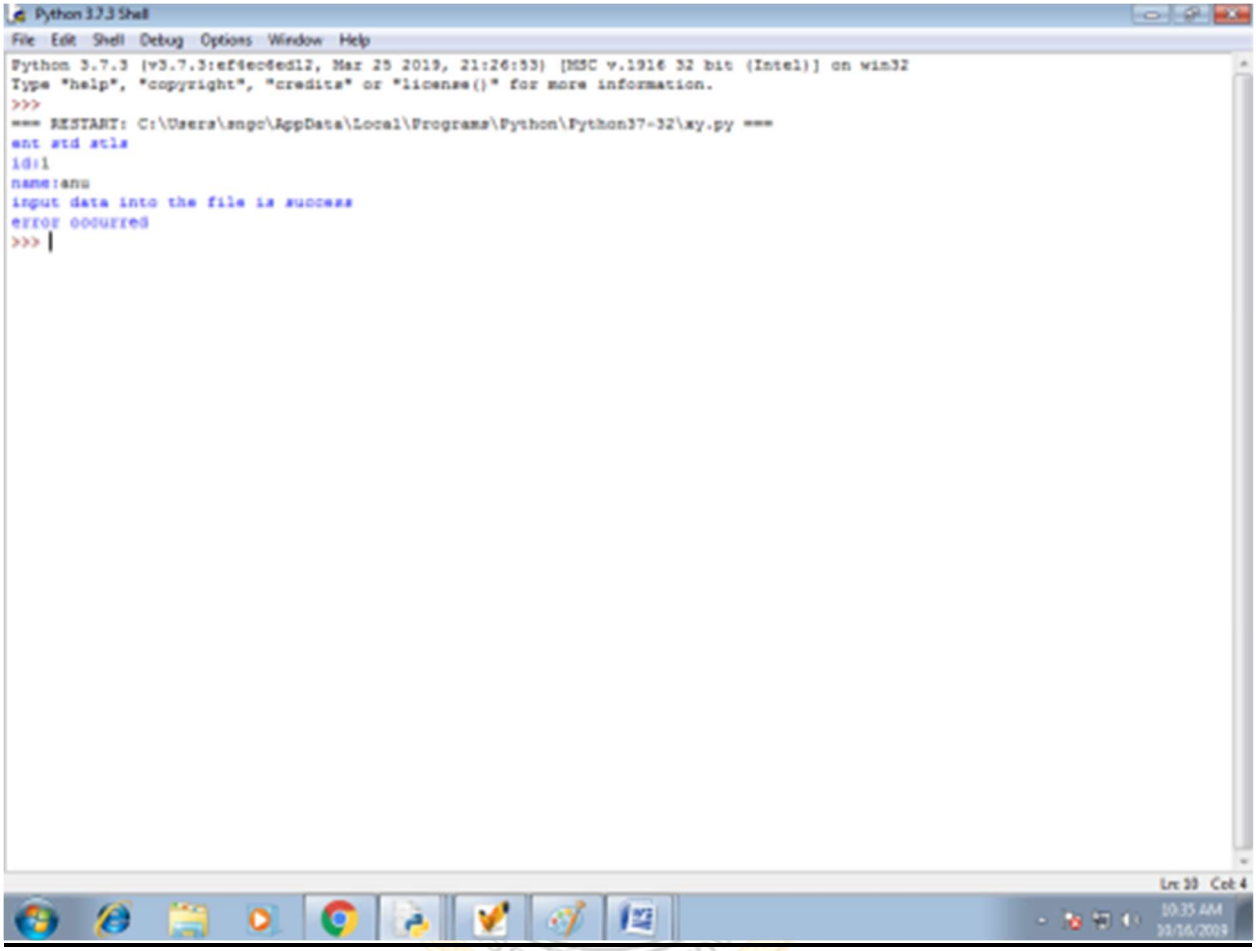
Date:

EXCEPTION HANDLING

SOURCE CODE:

```
try:
    f=open('new.txt','w')
    print("entstdstls")
    i=input("id:")
    n=input("name:")
    f.write(i)
    f.write(n)
    print("inputdataintothefileissuccess")
exceptIOError:
        print("IOErroroccuredfilenotfound")
exceptKeyboardInterrupt:
        print("KeyboardInterruptdontclickctrl+cordel")
finally:
        print("erroroccurred")
```

OUTPUT:


Python 3.7.3 Shell
File Edit Shell Debug Options Window Help
Python 3.7.3 (v3.7.3:ef4ec6ed12, Mar 25 2019, 21:26:53) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
=== RESTART: C:\Users\sngc\AppData\Local\Programs\Python\Python37-32\xy.py ===
ent std stla
id:1
name:anu
input data into the file is success
error occurred
>>>
Ln: 10 Col: 4

ProgramNo:6

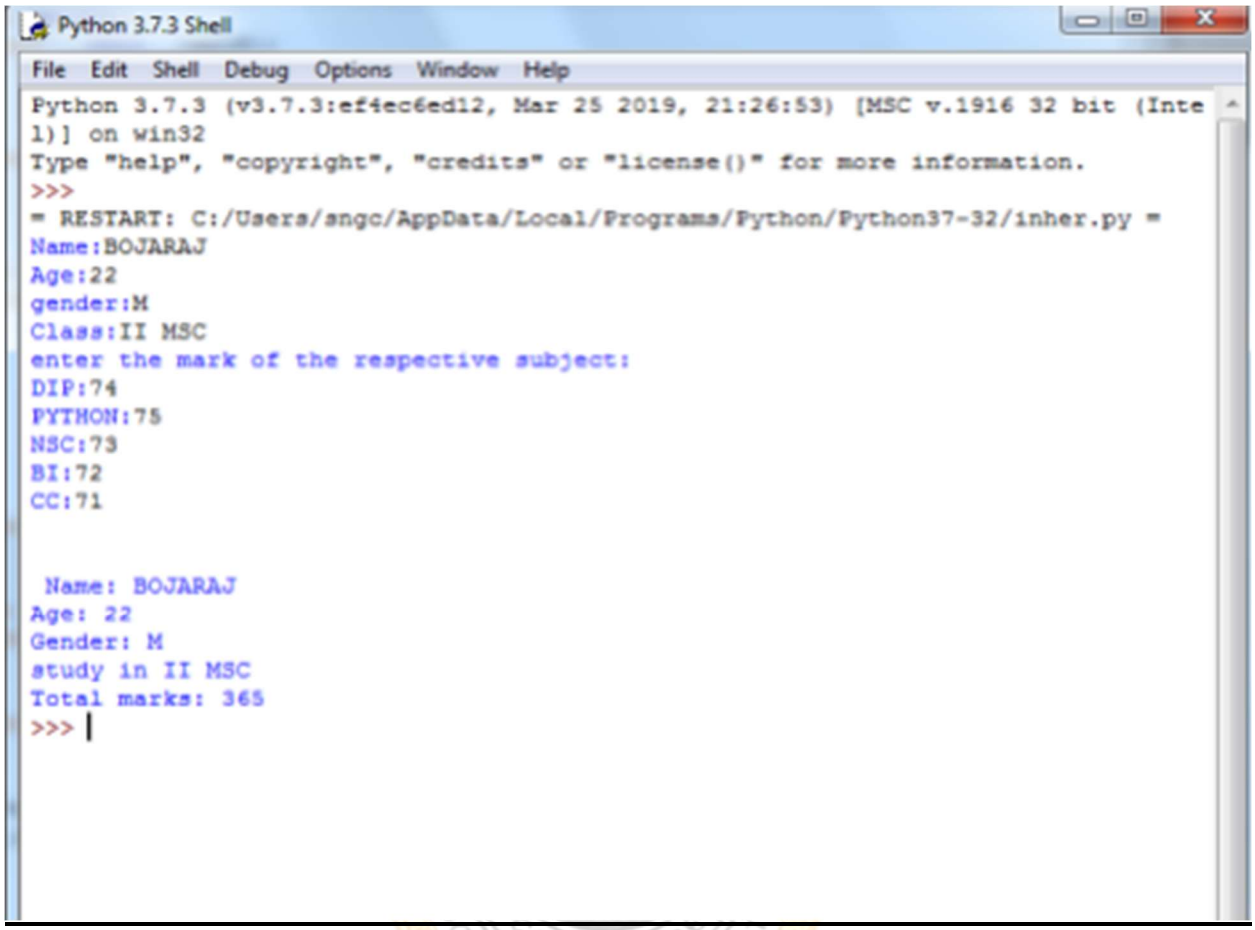
Date:

INHERITANCE

SOURCE CODE:

```
classperson:
   def__init__(self):
      self.name=input("Name:")
      self.age=input("Age:")
      self.gender=input("gender:")
   defdisplay(self):
      print("\n\nName:",self.name)
      print("Age:",self.age)
      print("Gender:",self.gender)
classmarks:
   def__init__(self):
      self.stuClass=input("Class:")
      print("enterthemarkoftherespectivesubject:")
      self.dip=int(input("DIP:"))
      self.python=int(input("PYTHON:"))
      self.nsc=int(input("NSC:"))
      self.bi=int(input("BI:"))
      self.cc=int(input("CC:"))
   defdisplay(self):
         print("studyin",self.stuClass)
         print("Totalmarks:",self.dip+self.python+self.nsc+self.bi+self.cc)
classstudent(person,marks):
   def__init__(self):
      person.__init__(self)
      marks.__init__(self)
   defresult(self):
      person.display(self)
      marks.display(self)
stu1=student()
stu1.result()
```

OUTPUT:


Python 3.7.3 Shell
File Edit Shell Debug Options Window Help
Python 3.7.3 (v3.7.3:ef4ec6ed12, Mar 25 2019, 21:26:53) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/sngc/AppData/Local/Programs/Python/Python37-32/inher.py =
Name:BOJARAJ
Age:22
gender:M
Class:II MSC
enter the mark of the respective subject:
DIP:74
PYTHON:75
NSC:73
BI:72
CC:71
Name: BOJARAJ
Age: 22
Gender: M
study in II MSC
Total marks: 365
>>>

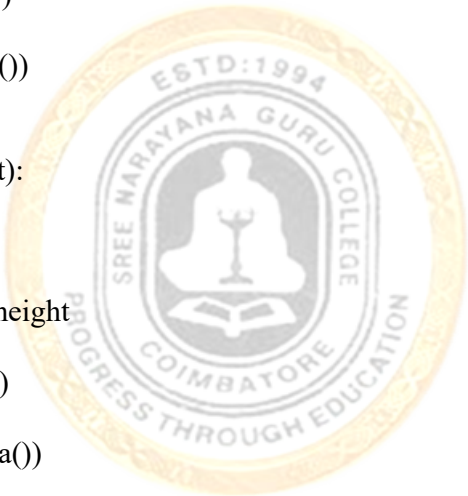
ProgramNo:7

Date:

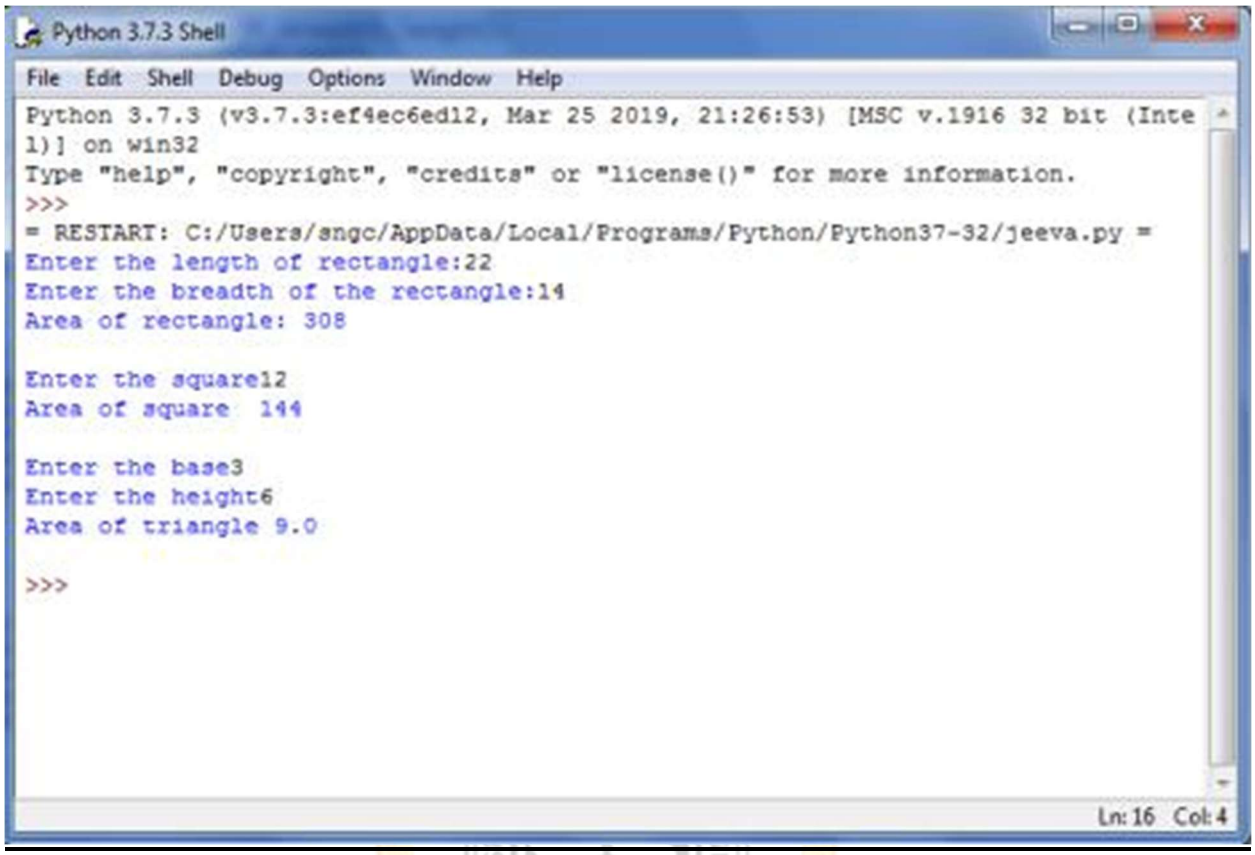
POLYMORPHISM

SOURCE CODE:

```
classrectangle():
   def__init__(self,breadth,length):
      self.breadth=breadth
      self.length=length
   defarea(self):
       returnself.length*self.breadth
a=int(input("Enterthelengthofrectangle:"))
b=int(input("Enterthebreadthoftherectangle:"))
obj=rectangle(a,b)
print("Areaofrectangle:",obj.area())
print()
classsquare():
    def__init__(self,side):
       self.side=side
    defarea(self):
       returnself.side*self.side
n=int(input("Enterthesquare"))
obj=square(n)
print("Areaofsquare",obj.area())
print()
classtriangle():
   def__init__(self,base,height):
      self.base=base
      self.height=height
   defarea(self):
      return0.5*self.base*self.height
ba=int(input("Enterthebase"))
h=int(input("Entertheheight"))
obj=triangle(ba,h)
print("Areaoftriangle",obj.area())
print()
```



OUTPUT:


Python 3.7.3 Shell
File Edit Shell Debug Options Window Help
Python 3.7.3 (v3.7.3:ef4ec6ed12, Mar 25 2019, 21:26:53) [MSC v.1916 32 bit (Inte
l)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/sngc/AppData/Local/Programs/Python/Python37-32/jeeva.py =
Enter the length of rectangle:22
Enter the breadth of the rectangle:14
Area of rectangle: 308
Enter the square12
Area of square 144
Enter the base3
Enter the height6
Area of triangle 9.0
>>>
Ln: 16 Col: 4

ProgramNo:8

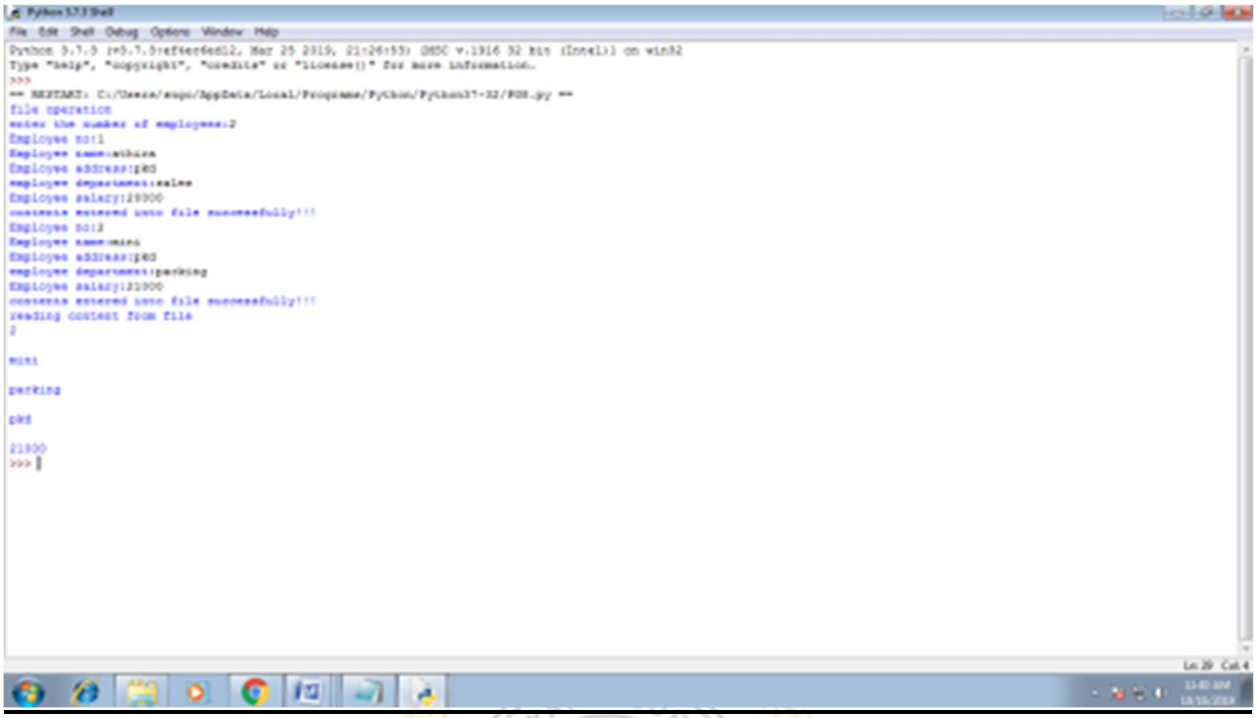
Date:

FILE OPERATION

SOURCE CODE:

```
print("fileoperation")
n=int(input("enterthenumberofemployees:"))
foriinrange(n):
    eno=input("Employeeeno:")
    ename=input("Employeename:")
    add=input("Employeeaddress:")
    dep=input("employeedepartment:")
    sal=input("Employeesalary:")
    f=open('file.txt','w')
    f.write(eno)
    f.write("\n")
    f.write(ename)
    f.write("\n")
    f.write(dep)
    f.write("\n")
    f.write(add)
    f.write("\n")
    f.write(sal)
    print("contentsenteredintofilesuccessfully!!!")
    f.close()
print("readingcontentfromfile")
f1=open('file.txt','r')
forxinf1:
    print(x)
```

OUTPUT:



ProgramNo:9

Date:

MODULE

SOURCE CODE:

OPERATION.PY

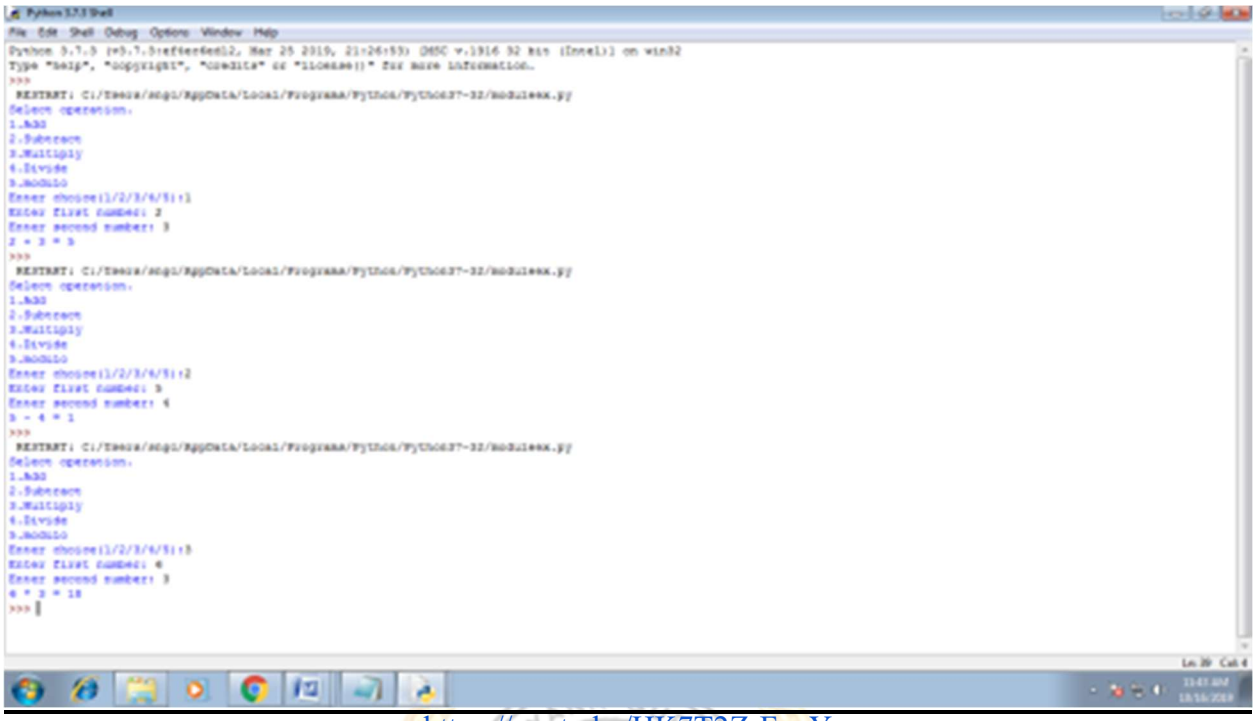
```
defadd(x,y):
  returnx+y
defsub(x,y):
  returnx-y
defmul(x,y):
  returnx*y
defdiv(x,y):
  returnx/y
defmodulo(x,y):
  returnx%y
```

MODULEEX.PY

```
fromoperationimport*
print("Selectoperation.")
print("1.Add")
print("2.Subtract")
print("3.Multiply")
print("4.Divide")
print("5.modulo")
choice=input("Enterchoice(1/2/3/4/5):")
num1=int(input("Enterfirstnumber:"))
num2=int(input("Entersecondnumber:"))
ifchoice=='1':
  print(num1,"+",num2,"=",add(num1,num2))
elifchoice=='2':
  print(num1,"-",num2,"=",sub(num1,num2))
```

```
elifchoice=='3':
   print(num1,"*",num2,"=",mul(num1,num2))
elifchoice=='4':
   print(num1,"/",num2,"=",div(num1,num2))
elifchoice=='5':
   print(num1,"%",num2,"=",modulo(num1,num2)) else:
   print("Invalidinput")
```

OUTPUT:



https://youtu.be/HK7T2Z-F_vY

ProgramNo:10

Date:

INTERACTIVE WEB PAGE

SOURCE CODE:

```
import webbrowser

# Replace 'html_file_path' with the full path to your HTML
file html_file_path = r'C:\path\to\your\file.html'

webbrowser.open('file://' + html_file_path)
```

HTML:

```
<html>
<head>
 <title>Interactive Web Page</title>
</head>
<body>
 <h1>Interactive Web Page with Form</h1>
 <p>{{ message }}</p>
 <form method="POST" action="/">
 <label for="name">Name:</label>
 <input type="text" name="name" id="name" required><br>
<label for="age">Age:</label>
 <input type="number" name="age" id="age" required><br>
<input type="submit" value="Submit">
 </form>
</body>
</html>
```

OUTPUT: