



SREENIVASA INSTITUTE OF TECHNOLOGY AND MANAGEMENT STUDIES

CHITTOOR - 517 127

(Autonomous)

DEPARTMENT OF MANAGEMENT STUDIES

II MBA III SEM

22MBA238 : INTRODUCTION TO PYTHON LAB MANUAL

II MBA III SEM

22MBA238 : INTRODUCTION TO PYTHON

LAB MANUAL

II MBA / I - SEMESTER

REGULATION: R22



BY

FACULTY INCHARGE : DR.K.SUDARSAN , PROFESSOR

DEPARTMENT : MASTER OF BUSINESS ADMINISTRATION



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INSTITUTE VISION AND MISSION

VISION:

To emerge as a Center of Excellence for Learning and Research in the domains of engineering, computing and management.

MISSION:

IM1: Provide congenial academic ambience with state-of-art resources for learning and research.

IM2: Ignite the students to acquire self-reliance in the latest technologies.

IM3: Unleash and encourage the innate potential and creativity of students.

IM4: Inculcate confidence to face and experience new challenges.

IM5: Foster enterprising spirit among students.

IM6: Work collaboratively with Technical Institutes / Universities / Industries of National, International repute.

DEPARTMENT OF MANAGEMENT STUDIES VISION AND MISSION

VISION

Become Center of Excellence for Educating Management Students as Leaders of Tomorrow.

MISSION

- Provide congenial academic ambience with necessary infrastructure and learning resources.
- Inculcate confidence to face and experience new challenges from industry and society.
- Ignite the students to acquire self-reliance in State-of-the-Art Technologies.
- Foster Enterprising spirit among students.



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Program Educational Objectives (PEOs)

PEO1: Have in-depth knowledge through life-long learning to conceptualize, critically analyze and add value in the areas of business management.

PEO2: Have lateral thinking enabling simple solutions for complex managerial problems.

PEO3: Ignite the passion for entrepreneurship.

PEO4: Inculcate a spirit of ethical and social commitment in the personal and professional life and to add value to the society.

Program Outcomes (POs)

| POs | Statements |
|------------|--|
| PO1 | Apply knowledge of management theories and practices to solve business problems |
| PO2 | Foster analytical and critical thinking abilities for data-based decision making |
| PO3 | Ability to develop value based leadership ability |
| PO4 | Ability to understand, analyze and communicate global, economic, legal and ethical aspects of business |
| PO5 | Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment |
| PO6 | Demonstrate competencies in theoretical concepts and practices in the field of human resource management |
| PO7 | Apply the ever evolving marketing techniques to encounter the challenges and leverage opportunities |
| PO8 | Apply financial knowledge and skills to take business decisions in professional business Environment |

Program Specific Outcomes (PSOs)

| PSOs | Statements |
|-------------|--|
| PSO1 | Apply core and functionary management skills for professional growth and business evaluation |
| PSO2 | Adapt to dynamic changes in an environment relevant to professional managerial practice and entrepreneurship as emerging leaders |



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| II MBA – Semester - III | | | | | |
|---|---|----------------|---|---|--------------------------------------|
| Course Code | INTRODUCTION TO PYTHON | L | T | P | C |
| 22MBA238 | | | 0 | 0 | 2 |
| Course Educational Objectives (CEO): | | | | | |
| CEO1: Enhance the knowledge on basic principles of python | | | | | |
| CEO2: Enhance the knowledge on functions and strings in python | | | | | |
| CEO3: Acquire the knowledge on data structures in python | | | | | |
| CEO4: Enable students to write simple object oriented programming in python | | | | | |
| CEO5: Understand the exception handling and modules | | | | | |
| UNIT - I | Introduction to Python | Lecture Hrs: 6 | | | |
| Introduction to Python, Python Features, Operators, Variables, Control Statements (conditional, looping, transfer) | | | | | |
| UNIT - II | Functions and Strings | Lecture Hrs 6 | | | |
| Functions: Function Definition, Function call, Types of Arguments, Lambda Function. Strings: String Handling Functions | | | | | |
| UNIT - III | Data Structures | Lecture Hrs:6 | | | |
| Lists, Tuples, Sets and Dictionaries | | | | | |
| UNIT - IV | Object Oriented Programming | Lecture Hrs:9 | | | |
| Object, Define Class, Constructor, Methods in Python, Inheritance, Abstraction, Polymorphism. | | | | | |
| UNIT - V | Exception Handling and Modules | Lecture Hrs:9 | | | |
| Exception, Syntax errors, Runtime Errors, Module - Math Module, Creating Modules | | | | | |
| Course Outcomes: | | | | | |
| On successful completion of the course the student will be able to, | | | | | POs & PSOs related to COs |
| CO1 | Understanding the knowledge on basic principles of python. | | | | PO2, PSO1 |
| CO2 | Apply the functions and strings in python. | | | | PO2, PSO1 |
| CO3 | Analyze the data structures in python. | | | | PO2, PSO1 |
| CO4 | Apply simple object oriented programming in python. | | | | PO2, PSO1 |
| CO5 | Analyze the data handling and modules. | | | | PO2, PSO1 |



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| |
|--|
| Text Books: |
| <ol style="list-style-type: none"> 1. Python for Programrs, Paul Deitel and Harvey Deitel, Pearson Education, 1st Edition, 2021. 2. Python Programming: An Introduction to Computer Science, 3/e, John M Zelle, Franklin Beedle, Independent Publishers, 2020. |
| Reference Book: |
| <ol style="list-style-type: none"> 1. Computational Thinking: A Primer for Programrs and Data Scientists, 1/e, G Venkatesh and Madhavan Mukund, Notion Press, 2021. 2. Introduction to Computation and Programming Using Python: With Applications to Computational Modeling and Understanding Data, 3/e, John V Guttag, & Quot, MIT Press 2021. |
| Online Learning Resources: |
| https://www.programiz.com/python-programming https://www.youtube.com/watch?v=adNgan70iyU https://www.youtube.com/watch?v=c235EsGFcZs |

COURSE OUTCOMES VS POs MAPPING (DETAILED; HIGH:3; MEDIUM:2; LOW:1):

| Course | PO | PO | PO | PO | PO | PO | PO | PO | PO | PSO1 | PSO2 |
|---|----------------|----|----------|----|----|----|----|----|----|----------|------|
| | CO | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | |
| C2308 : INTRODUCTION TO PYTHON | C2308.1 | - | 3 | - | - | - | - | - | - | 3 | - |
| | C2308.2 | - | 3 | - | - | - | - | - | - | 3 | - |
| | C2308.3 | - | 3 | - | - | - | - | - | - | 3 | - |
| | C2308.4 | - | 3 | - | - | - | - | - | - | 3 | - |
| | C2308.5 | - | 3 | - | - | - | - | - | - | 3 | - |
| | C2308 | - | 3 | - | - | - | - | - | - | 3 | - |



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LIST OF EXPERIMENTS

| S. No. | Experiment Name |
|---------------|--|
| 1 | Check the given number is prime or not in python program. |
| 2 | Create a program containing a pair of nested while loops that displays the integer values 1–100, ten numbers per row, with the columns aligned as shown below : 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 ----- 91 92 93 94 95 96 97 98 99 100 |
| 3 | Check biggest among 3 numbers in python program. |
| 4 | Create a Python program to perform the string operations by using string functions. |
| 5 | Create a python program to print the reverse of a given string. |
| 6 | Create the lists and perform the different operations by using list functions. |
| 7 | Create a python program by using functions to prints the sum the lists. |
| 8 | Create the tuple and set to perform different operations on tuple and sets by using tuple and set functions. |
| 9 | Create the dictionary to perform add, changing, updating the dictionary and to perform different operations |
| 10 | Create a python program to prints the area of rectangle and area of triangle by using inheritance. |
| 11 | Create a python program by using abstraction concept. |
| 12 | Perform method overriding in python program. |
| 13 | Create a python program by using exception handing concepts. |
| 14 | Create a custom module in python program. |
| 15 | Perform the calculations by using math module in python program. |



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Table No. 1: Rubrics for Python Lab

| CO | Excellent (3) | Good (2) | Fair (1) |
|-------------------|---|---|--|
| Assemble (CO1) | Student successfully completes the activity, gathers appropriate data about the topic and gives effective oral presentations. | Student successfully completes the activity, gathers data about the topic and gives effective oral presentations. | Student successfully completes the activity, gathers data about the topic and gives oral presentations moderately. |
| Exhibit (CO2) | Learns and exhibits effective teambuilding skills through participation in group activities | Learns and exhibits reasonable teambuilding skills through participation in group activities | Learns and exhibits poor teambuilding skills through participation in group activities |
| Apply (CO3) | Student gains excellent knowledge in winning job interviews | Student gains moderate knowledge in winning job interviews | Student gains little knowledge in winning job interviews |
| Develop (CO4) | Student gains excellent knowledge in learning new concepts | Student gains moderate knowledge in learning new concepts | Student gains poor knowledge in learning new concepts |
| Derive (CO5) | Student develops outstanding professional and career competence skills | Student develops reasonable professional and career competence skills | Student develops deprived professional and career competence skills |



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DAY-TO-DAY EVALUATION OF LAB ACTIVITY:

REG. No.:

| S. No. | ACTIVITY | ASSEMBLE | EXHIBIT | APPLY | DEVELOP | DERIVE |
|----------------|---|----------|---------|-------|---------|--------|
| 1 | Establishing a Framework for Business Communication | | | | | |
| 2 | Focusing on Interpersonal and Group Communication | | | | | |
| 3 | Planning and Preparing Spoken and Written Messages | | | | | |
| 4 | Communicating Electronically | | | | | |
| 5 | Delivering Good News and Bad News Messages | | | | | |
| 6 | Understanding the Report Process and Research Methods | | | | | |
| 7 | Organizing and Preparing Reports and Proposals | | | | | |
| 8 | Designing and Delivering Business Presentations | | | | | |
| 9 | Preparing Resumes and Application Messages | | | | | |
| 10 | Interviewing for a Job | | | | | |
| 11 | Work Place Etiquette | | | | | |
| Average | | | | | | |



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| 14 | Create a custom module in python program. |
| 15 | Perform the calculations by using math module in python program. |



1. Check the given number is prime or not in python program.

```
prime.py - D:/py lab/prime.py (3.10.2)
File Edit Format Run Options Window Help
n=int(input("enter a number"))
for i in range(2,n):
    if n%i==0:
        print("not a prime number")
        break
else:
    print("it is a prime number")

IDLE Shell 3.10.2
File Edit Shell Debug Options Window Help
Python 3.10.2 (tags/v3.10.2:a58ebcc, Jan 17 2022
, 14:12:15) [MSC v.1929 64 bit (AMD64)] on wi
n32
Type "help", "copyright", "credits" or "license()" f
or more information.
>>>
===== RESTART:
D:/py lab/prime.py =====
enter a number5
it is a prime number
>>>
```

2. Create a program containing a pair of nested while loops that displays the integer values 1–100, ten numbers per row, with the columns aligned as shown below :

```
1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30
-----
91 92 93 94 95 96 97 98 99 100
```



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```
number 1-100.py - C:/Users/Gangadhar/Desktop/cds/number 1-100.py (3.10.2)
File Edit Format Run Options Window Help
i=1
j=11
while(i<=100):
    print(i,end=" ")
    i=i+1
    while(i==j):
        print(' ')
        j=j+10
```

```
IDLE Shell 3.10.2
Python 3.10.2 (tags/v3.10.2:a58ebcc, Jan 17 2022
, 14:12:15) [MSC v.1929 64 bit (AMD64)] on wi
n32
Type "help", "copyright", "credits" or "lice
nse()" f
or more information.
>>>
===== RESTART: C:/Users/Gangadha
r/Desktop/cds/number 1-100.py =====
1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30
31 32 33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48 49 50
51 52 53 54 55 56 57 58 59 60
61 62 63 64 65 66 67 68 69 70
71 72 73 74 75 76 77 78 79 80
81 82 83 84 85 86 87 88 89 90
91 92 93 94 95 96 97 98 99 100
>>>
```

3. Check biggest among 3 numbers in python program.

```
biggest.py - D:/py lab/biggest.py (3.10.2)
File Edit Format Run Options Window Help
a=int(input("enter a number"))
b=int(input("enter b number"))
c=int(input("enter c number"))
if (a>b) and (a>c):
    print("a is big")
elif (b>a) and (b>c):
    print("b is big")
else:
    print("c is big")
```



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```
Python 3.10.2 (tags/v3.10.2:a58ebcc, Jan 17 2022
, 14:12:15) [MSC v.1929 64 bit (AMD64)] on wi
n32
Type "help", "copyright", "credits" or "license()" f
or more information.
>>>
===== RESTART: =====
D:/py lab/biggest.py
=====
enter a number20
enter b number90
enter c number5
b is big
>>>
```

4. Create a Python program to perform the string operations by using string functions.

```
#string functions in python

#create the string
name="python"
print(name)
print(type(name))

#accessing string charecters by using index
name="python"
print(name[1])

#accessing string characters by using backword index
name="python"
print(name[-1])

#accessing string characters by using slicing
#slicing is used to access group of characters
name="python"
print(name[1:3])
```

```
#compare to strings
str1="hello world"
str2="i love python"
print(str1==str2)

#join the strings
str1="good mornin"
str2="i love python"
print(str1+ str2)

#iterate the python string
str1="good morning"
for i in str1:
    print(i)

#string length
str1="hello"
print(len(str1))
```



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```
print(name.startswith("wel"))

#endswith
name="welcome to python"
print(name.endswith("wel"))

#is numeric
pin="1234"
print(pin.isnumeric())

#is aplha
name="abcs"
print(name.isalpha())
```

```
>>>
===== RESTART: D:/py la
b/Stringsoperations.py =====
=
python
<class 'str'>
y
n
yt
False
good mornini love python
g
o
o
d

m
o
r
```



```
>>> ===== RESTART: D:/py la
b/Stringsoperations.py =====
python
<class 'str'>
y
n
yt
False
good mornini love python
g
o
o
d

m
o
r
```

```
o
d

m
o
r
n
i
n
g
5
HELLO
hello
cat call
True
False
True
True
>>>
```

5. Create a python program to print the reverse of a given string.

```
reverse.py - D:/py lab/reverse.py (3.10.2)
File Edit Format Run Options Window Help
s="SITAMS"
n=len(s)
i=-1
while i>=-n:
    print(s[i],end=' ')
    i=i-1
```



```
IDLE Shell 3.10.2
File Edit Shell Debug Options Window Help
Python 3.10.2 (tags/v3.10.2:a58ebcc, Jan 17 2022
, 14:12:15) [MSC v.1929 64 bit (AMD64)] on wi
n32
Type "help", "copyright", "credits" or "license()" f
or more information.
>>>
===== RESTART:
D:/py lab/reverse.py =====
SMATIS
>>>
```

6. Create the lists and perform the different operations by using list functions.

```
list.py - D:\py lab\list.py (3.10.2)
File Edit Format Run Options Window Help
#create the empty list
list=[]
print(list)

#append() function
list.append(10)
print(list)

#insert() function
list.insert(1,20)
print(list)

#extend() function
list.extend([30,40,50,60])
print(list)

#reverse() function
list.reverse()
print(list)
```



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```
list.py - D:\py lab\list.py (3.10.2)
File Edit Format Run Options Window Help

print(list[1])

#slicing
print(list[2:5])

#pop() function
list.pop()
print(list)

#remove() function

list.remove(20)
print(list)
```

```
IDLE Shell 3.10.2
File Edit Shell Debug Options Window Help

{40, 10, 80, 50, 20, 90, 60, 30}
4
{40, 10, 80, 50, 20, 90, 60, 30}
{10, 20}
{40, 50, 30}
>>>
===== RESTART: D:\py lab\list.py =====
[]
[10]
[10, 20]
[10, 20, 30, 40, 50, 60]
[60, 50, 40, 30, 20, 10]
6
1
[10, 20, 30, 40, 50, 60]
20
[30, 40, 50]
[10, 20, 30, 40, 50]
[10, 30, 40, 50]
>>>
```




```
IDLE Shell 3.10.2
File Edit Shell Debug Options Window Help
{40, 10, 80, 50, 20, 90, 60, 30}
4
{40, 10, 80, 50, 20, 90, 60, 30}
{10, 20}
{40, 50, 30}
>>>
===== RESTART: D:\py lab\list.py =====
[]
[10]
[10, 20]
[10, 20, 30, 40, 50, 60]
[60, 50, 40, 30, 20, 10]
6
1
[10, 20, 30, 40, 50, 60]
20
[30, 40, 50]
[10, 20, 30, 40, 50]
[10, 30, 40, 50]
>>>
```

7. Create a python program by using functions to print the sum of elements in the lists.

```
sumlist.py - D:/py lab/sumlist.py (3.10.2)
File Edit Format Run Options Window Help
#to perform the sum of the elements the list
def list1(items):
    sum = 0
    for i in items:
        sum += i
    return sum
print(list1([1,2,8,20,-5,-2]))

IDLE Shell 3.10.2
File Edit Shell Debug Options Window Help
Python 3.10.2 (tags/v3.10.2:a58ebcc, Jan 17 2022
, 14:12:15) [MSC v.1929 64 bit (AMD64)] on wi
n32
Type "help", "copyright", "credits" or "license()" f
or more information.
>>>
===== RESTART:
D:/py lab/sumlist.py =====
24
>>>
```



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8. Create the tuple and set to perform different operations on tuple and sets by using tuple and set functions.

```
screenshot (289).png
tuples and sets.py - G:/code/tuples and sets.py (3.9.10)
File Edit Format Run Options Window Help
#create a empty tuple
t=()
type(t)

#insert elements into tuple
t=(10,20,10,30,20,50,5,6)
print(t)

#len()
print(len(t))

#sorted the tuple
print(sorted(t))

#count()
print(t.count(10))

#concatenation
t1=(10,20,30)
print(t+t1)

IDLE Shell 3.9.10
File Edit Shell Debug Options Window Help
Python 3.9.10 (tags/v3.9.10:f2f3f53, Jan 17 2022, 15:14:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: G:/code/
tuples and sets.py =====
(10, 20, 10, 30, 20, 50, 5, 6)
8
[5, 6, 10, 10, 20, 20, 30, 50]
2
(10, 20, 10, 30, 20, 50, 5, 6, 10, 20, 30)
>>>
```



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```
Screenshot (290).png
G:\code\sets.py (3.9.10)
File Edit Format Run Options Window Help
#create a empty set
s=set()
print(type(s))

#add a element into the set
s.add(10)
print(s)

#add a group of elements into the set
s.update([20,30,40,50])
print(s)

#copy()
s1=s.copy()
print(s1)

#pop()
print(s1.pop())

#remove()
print(s1.remove(30))
print(s1)

#union()
print(s)
print(s1)
print(s1.union(s))

#intersection()
print(s1.intersection())

#difference()
print(s1.difference(s))
```

```
Python 3.9.10 (tags/v3.9.10:f2f3f53, Jan 17 2022, 15:14:21) [MSC v...
1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more inform...
ation.
>>>
===== RESTART: G:/code/sets.py =====
>>>
<class 'set'>
{10}
{40, 10, 50, 20, 30}
{50, 20, 40, 10, 30}
50
None
{20, 40, 10}
{40, 10, 50, 20, 30}
{20, 40, 10}
{40, 10, 50, 20, 30}
{40, 10, 20}
set()
>>>
```

9. Create the dictionary to perform add, changing, updating the dictionary and to perform different operations.

```
dictionary.py - D:\py lab\dictionary.py (3.10.2)
File Edit Format Run Options Window Help
#create the empty dictionary
d={}
print(d)

#insert the values into dictionary
d={1:"mon",2:"tue",3:"wed",4:"thur"}
print(d)

#access the elems
print(d[1])

#change or modify already existing dictionary the elem

d[1]="sun"
print(d)

#copy from one dictionary to another dictionary
d1=d.copy()
print(d1)
```



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```
Screenshot (316).png
dictionary.py - D:/py lab/dictionary.py (3.10.2)
File Edit Format Run Options Window Help

#copy from one dictionary to another dictionary
d1=d.copy()
print(d1)

#access the keys

print(d1.keys())

#access the values
print(d1.values())

#popitem() in the dict
print(d1.popitem())

#pop()
print(d1.pop(1))
```

```
IDLE Shell 3.10.2
File Edit Shell Debug Options Window Help
{1: 'mon', 2: 'tue', 3: 'wed', 4: 'thur'}
mon
{1: 'sun', 2: 'tue', 3: 'wed', 4: 'thur'}
{1: 'sun', 2: 'tue', 3: 'wed', 4: 'thur'}
dict_keys([1, 2, 3, 4])
dict_values(['sun', 'tue', 'wed', 'thur'])
(4, 'thur')
sun
>>>
==== RESTART: D:/py lab/dictionary.py ====
{}
{1: 'mon', 2: 'tue', 3: 'wed', 4: 'thur'}
mon
{1: 'sun', 2: 'tue', 3: 'wed', 4: 'thur'}
{1: 'sun', 2: 'tue', 3: 'wed', 4: 'thur'}
dict_keys([1, 2, 3, 4])
dict_values(['sun', 'tue', 'wed', 'thur'])
(4, 'thur')
sun
>>>
```



```
IDLE Shell 3.10.2
File Edit Shell Debug Options Window Help
{1: 'mon', 2: 'tue', 3: 'wed', 4: 'thur'}
mon
{1: 'sun', 2: 'tue', 3: 'wed', 4: 'thur'}
{1: 'sun', 2: 'tue', 3: 'wed', 4: 'thur'}
dict_keys([1, 2, 3, 4])
dict_values(['sun', 'tue', 'wed', 'thur'])
(4, 'thur')
sun
>>>
==== RESTART: D:/py lab/dictionary.py ====
{}
{1: 'mon', 2: 'tue', 3: 'wed', 4: 'thur'}
mon
{1: 'sun', 2: 'tue', 3: 'wed', 4: 'thur'}
{1: 'sun', 2: 'tue', 3: 'wed', 4: 'thur'}
dict_keys([1, 2, 3, 4])
dict_values(['sun', 'tue', 'wed', 'thur'])
(4, 'thur')
sun
>>>
```

10. Create a python program to prints the area of rectangle and area of triangle by using inheritance.

```
ee.py - D:/py lab/ee.py (3.10.2)
File Edit Format Run Options Window Help
class Rect:
    def __init__(self,l,w):
        self.l=l
        self.w=w
    def area(self):
        return self.l*self.w
class Triangle(Rect):
    def __init__(self, l, w,h):
        Rect.__init__(self,l,w)
        self.h=h
    def area1(self):
        return self.area()*self.h
c=Triangle(30,40,50)
print(c.area())
print(c.area1())
```



```
IDLE Shell 3.10.2
File Edit Shell Debug Options Window Help
Python 3.10.2 (tags/v3.10.2:a58ebcc, Jan 17 2022
, 14:12:15) [MSC v.1929 64 bit (AMD64)] on wi
n32
Type "help", "copyright", "credits" or "license()" f
or more information.
>>>
===== RESTART
: D:/py lab/ee.py =====
=====
1200
60000
>>>
```

11. Create a python program by using abstraction concept.

```
abs.py - D:/py lab/abs.py (3.10.2)
File Edit Format Run Options Window Help
from abc import ABC
class Polygon(ABC):
    def sides(self):
        pass
class Triangle(Polygon):
    def sides(self):
        print("triangle hs 3 sides")
class Square(Polygon):
    def sides(self):
        print("square has 4 sides")
obj=Triangle()
obj.sides()
```

```
IDLE Shell 3.10.2
File Edit Shell Debug Options Window Help
Python 3.10.2 (tags/v3.10.2:a58ebcc, Jan 17 2022
, 14:12:15) [MSC v.1929 64 bit (AMD64)] on wi
n32
Type "help", "copyright", "credits" or "license()" f
or more information.
>>>
===== RESTART
: D:/py lab/abs.py =====
=====
triangle hs 3 sides
>>>
```



12. Perform method overriding in python program.

```
override.py - D:\py lab/override.py (3.10.2)
File Edit Format Run Options Window Help

class Parent:
    def property(self):
        print("gold+land+cash")
    def m1(self):
        print("good morning")
class Child(Parent):
    def m1(self):
        print("good evening")
obj=Child()
obj.property()
obj.m1()
```

```
IDLE Shell 3.10.2
File Edit Shell Debug Options Window Help

Python 3.10.2 (tags/v3.10.2:a58ebcc, Jan 17 2022
, 14:12:15) [MSC v.1929 64 bit (AMD64)] on wi
n32
Type "help", "copyright", "credits" or "license()" f
or more information.
>>>
===== RESTART: D:
/py lab/override.py =====
gold+land+cash
good evening
>>>
```

13. Create a python program by using exception handling concepts.

```
Screenshot (291).png
AE.py - G:\code\AE.py (3.9.10)
File Edit Format Run Options Window Help

#exception handling

try:
    n=int(input("enter a number:"))
    d=int(input("enter anumber:"))
    res=n/d
    print(res)
except:
    print("the denaminator cant be zero please try again :":""it is
print("the program end")
```

```
IDLE Shell 3.9.10
File Edit Shell Debug Options Window Help

Python 3.9.10 (tags/v3.9.10:f2f3f53, Jan 17 2022, 15:14:21) [MSC v
.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more inform
ation.
>>>
===== RESTART: G:/code/AE.py =====
enter a number:42
enter anumber:0
the denaminator cant be zero please try again :":""it is zero divisio
n error
the program end
>>> |
```

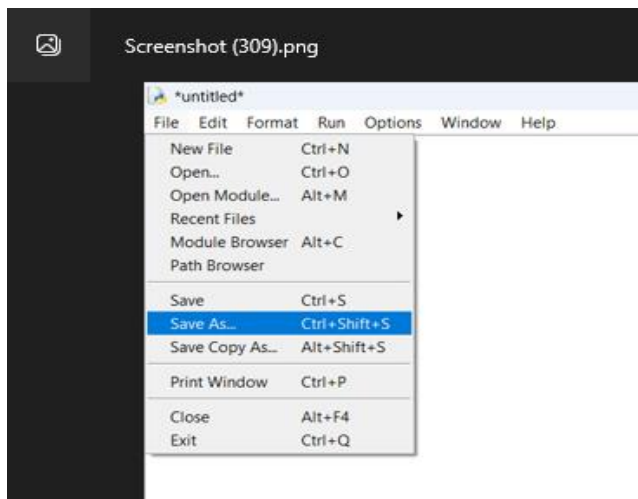


14. Create a custom module in python program.

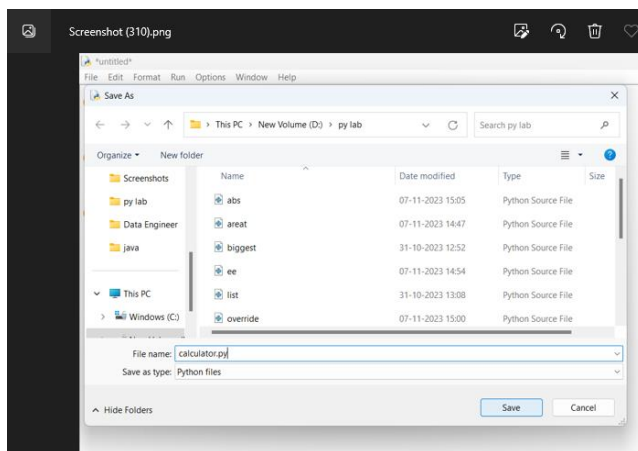
Step - 1

```
def add(a,b):  
    return a+b  
def sub(a,b):  
    return a-b  
def mult(a,b):  
    return a*b
```

Step - 2



Step - 3





Step – 4

```
calculator.py |> "untitled*"
File Edit Format Run Options Window Help
def add: import calculator
return: result1=calculator.add(2,3)
def sub: print(result1)
return: result2=calculator.sub(10,5)
def mul: print(result2)
return: result3=calculator.mul(10*5)
return: print(result3)
```

Step – 5

```
calculator.py - D: |> "untitled*"
File Edit Format Run Options Window Help
New File Ctrl+N
Open... Ctrl+O
Open Module... Alt+M
Recent Files
Module Browser Alt+C
Path Browser
Save Ctrl+S
Save Copy As... Alt+Shift+S
Print Window Ctrl+P
Close Alt+F4
Exit Ctrl+Q
def add:
return:
def sub:
return:
def mul:
return:
```

Step – 6

```
Screenshot (313).png
calculator.py - D: |> "untitled*"
File Edit Format Run Options Window Help
Save As
This PC > New Volume (D:) > py lab
Search py lab
Organize New folder
Screenshots
py lab
Data Engineer
java
This PC
Windows (C:)
Name
abs
areat
biggest
calculator
ee
list
Date modified
07-11-2023 15:05
07-11-2023 14:47
31-10-2023 12:52
07-11-2023 15:09
07-11-2023 14:54
31-10-2023 13:08
Type
Python Source File
Python Source File
Python Source File
Python Source File
Python Source File
Python Source File
Size
File name: main.py
Save as type: Python files
Save Cancel
```

Step – 7

```
main.py - D:\py lab\main.py (3.10.2)
File Edit Format Run Options Window Help
import calculator
result1=calculator.add(2,3)
print(result1)
result2=calculator.sub(10,5)
print(result2)
result3=calculator.muilt(10,5)
print(result3)
```



SREENIVASA INSTITUTE OF TECHNOLOGY AND MANAGEMENT STUDIES

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(Autonomous)

DEPARTMENT OF MANAGEMENT STUDIES

II MBA III SEM

22MBA238 : INTRODUCTION TO PYTHON LAB MANUAL

```
Python 3.10.2 (tags/v3.10.2:a58ebcc, Jan 17 2022, 14:12:15) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: =====
D:/py lab/main.py
=====
5
5
50
>>>
```

15. Perform the calculations by using math module in python program.

```
import math
#sqrt
n=25
res=math.sqrt(n)
print(res)

#power
res1=math.pow(5,2)
print(res1)

#ceil and floor
c=2.3
print(math.ceil(c))
print(math.floor(c))

#factorial
d=5
print(math.factorial(d))

#absolute
abs=-10
print(math.fabs(abs))
```

```
Python 3.9.10 (tags/v3.9.10:f2f3f53, Jan 17 2022, 15:14:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: G:/code/math.py =====
5.0
25.0
3
2
120
10.0
>>>
```