



Sri Shyla Education Trust(R)

GM INSTITUTE OF TECHNOLOGY

Davangere

**Department of Artificial Intelligence and
Machine Learning**

INVITATION

All are cordially invited for workshop



Python Programming

Convenor

Keerthi Prasad G

Head, Dept. of. AIML
GMIT, Davangere

Dr.Y Vijaya Kumar

Principal
GMIT, Davangere

Resource Person

Asha K

Asst.Prof., Dept. of. AIML

Mukta Pujar

Asst.Prof., Dept. of. AIML

Kavyashree B L

Asst.Prof., Dept. of. AIML

Akshatha A M S

Asst.Prof., Dept. of. AIML

(07TH & 08TH November 2022)

@ 9:30 AM - 4:00 PM

Venue: AIML Department



Srishyia Educational Trust (R), Bheemasamudra

GM INSTITUTE OF TECHNOLOGY, DAVANGERE

Approved by AICTE | Affiliated by V.T.U Belagavi | Recognized by Govt. of Karnataka



DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

REPORT OF PYTHON PROGRAMMING WORKSHOP

This was the two days' workshop on Python Programming organized by Department of Artificial Intelligence and Machine Learning on **07th** and **08th of November-2022** for AIML 5th semester students. This workshop was appreciated by all the students as they were able to add another programming language in their technical skill set and to explore the power and simplicity of python.

Dr.Y.Vijaya Kumar,Principal,GMIT inaugurated the workshop and motivated the students to actively participate and gain knowledge from the resource persons. Since AIML is the new department and subjects are challenging to understand and hence all the students must be serious about their academics and workshops conducted by the respective departments. Also he added by giving additional information regarding placements and how such workshops will be beneficial for students placement benefit.

Day-1 (07-11-2022) : Introduction to python

The students were given brief introduction about python programming language, its features and characteristics and were compared to other programming languages, and the following topics were covered.

1. What is python?
2. Applications of python (web applications, web frameworks, GUI based desktop applications etc.)
3. Data types in python with programs.
4. Loops & conditions in python with programs.
5. Importance of Python, Future aspects of Python
7. Downloading Python, Installing Python, Understanding the command window and script windows
8. Understanding the basics of Python. Process of structuring the data using lists, tuples and dictionaries
9. Demonstrate the use of built-in functions to navigate the file system



Slrshyia Educational Trust (R), Bheemasamudra

GM INSTITUTE OF TECHNOLOGY, DAVANGERE

Approved by AICTE | Affiliated by V.T.U Belagavi | Recognized by Govt. of Karnataka



DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

10. Handling of loops and creation of functions.

11. Exception Handling, Multiple Exception Handling, information about Data Science in real life and how python is useful for career opportunities.

12. String manipulation, Lists, Tuples, Dictionaries, Sets in python.

13. Range, Functions, Variables, Modules in python.

Day-2 : Advanced Python Programming concepts

Day-2 was carried out with the understanding of concepts on Regular expressions and file systems, Object-Oriented Programming as used in Python, Need for scraping websites working with CSV,JSON, and other file formats. The following topics were covered briefly in the session.

- Finding Patterns of Text Without Regular Expressions, Finding Patterns of Text with Regular Expressions, More Pattern Matching with Regular Expressions, Greedy and Nongreedy Matching.
- The findall() Method, Character Classes, Making Your Own Character Classes, The Caret and Dollar Sign Characters, The Wildcard Character, Review of Regex Symbols, Case-Insensitive Matching, Substituting Strings with the sub() Method.
- Managing Complex Regexes, Combining re .IGNORECASE, re .DOTALL, and re .VERBOSE.
- Reading and Writing Files, Files and File Paths, The os.path Module, The File Reading/Writing Process, Saving Variables with the shelve Module, Saving Variables with the pprint.pformat() Function.
- Classes and objects, Classes and functions, Classes and methods, Inheritance.
- MAPIT.PY with the webbrowser Module.
- Working with Excel spread sheets, working with CSV files and JSON data.

Finally the session ended with a sportive and informative ways. Students were able to gain knowledge over Python Programming and were excited to implement games in python language.



Slrshyia Educational Trust (R), Bheemasamudra

GM INSTITUTE OF TECHNOLOGY, DAVANGERE

Approved by AICTE | Affiliated by V.T.U Belagavi | Recognized by Govt. of Karnataka



DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Below are the few glimpses of Python Programming workshop





Slrshlyla Educational Trust (R), Bheemasamudra

GM INSTITUTE OF TECHNOLOGY, DAVANGERE

Approved by AICTE | Affiliated by V.T.U Belagavi | Recognized by Govt. of Karnataka



DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING



Below are the screenshots captured in the workshop



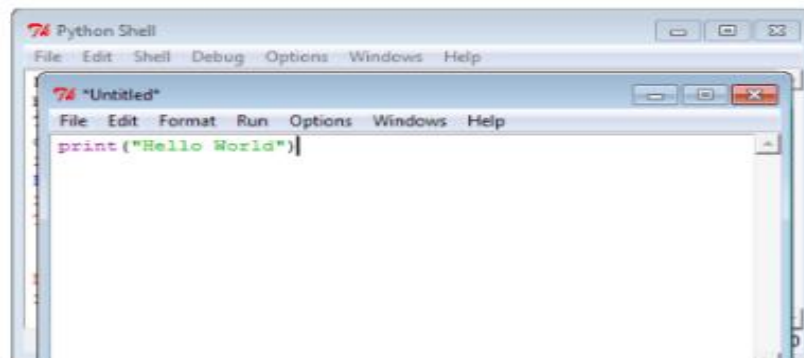
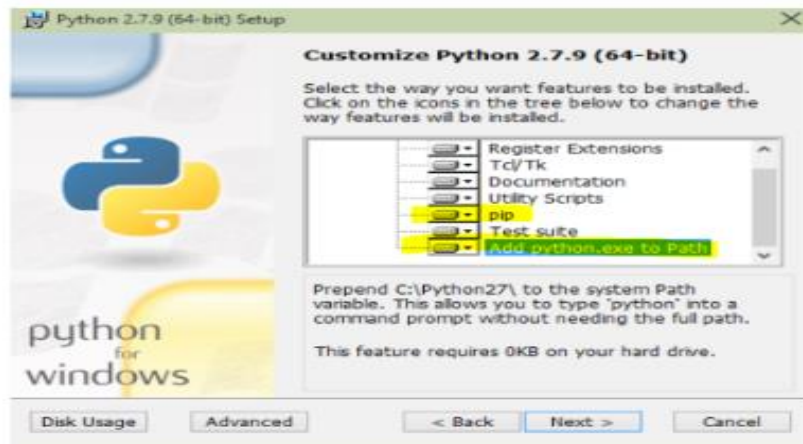
Srishylia Educational Trust (R), Bheemasamudra

GM INSTITUTE OF TECHNOLOGY, DAVANGERE

Approved by AICTE | Affiliated by V.T.U Belagavi | Recognized by Govt. of Karnataka



DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING





Shrisha Educational Trust (R), Bheemasamudra

GM INSTITUTE OF TECHNOLOGY, DAVANGERE

Approved by AICTE | Affiliated by V.T.U Belagavi | Recognized by Govt. of Karnataka



DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

```
Python Shell
File Edit Shell Debug Options Windows Help
Python 2.5.4 (r254:67916, Dec 23 2008, 15:10:54) [MSC v.1310 32 bit (Intel)]
on win32
Type "copyright", "credits" or "license()" for more information.

*****
Personal firewall software may warn about the connection IDLE
makes to its subprocess using this computer's internal loopback
interface. This connection is not visible on any external
interface and no data is sent to or received from the Internet.
*****

IDLE 1.2.4
>>>
```

```
#####for i in range(0,1):
##### a[i] =b[i]
#####print

#.....CLASS & OBJECTS.....

##BANKING SYSTEM.....
class bank(object):
    def __init__(self):
        self.bal=0
    def deposit(self,amount):
        self.bal=self.bal+amount
        return self.bal
    def withdraw(self,amount):
        if amount>self.bal:
            print'insufficient balance'
        else:
            self.bal=self.bal-amount
        return self.bal
ac123=bank()
ac123.deposit(2000)
print ac123.bal
ac123.withdraw(1500)
print ac123.bal
```



Slrshylia Educational Trust (R), Bheemasamudra

GM INSTITUTE OF TECHNOLOGY, DAVANGERE

Approved by AICTE | Affiliated by V.T.U Belagavi | Recognized by Govt. of Karnataka



DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

```
Python 2.6.6 (r266:84292, Dec 26 2010, 22:31:48)
[GCC 4.4.3] on linux2
Type "copyright", "credits" or "license()" for more information.

*****
Personal firewall software may warn about the connection IDLE
makes to its subprocess using this computer's internal loopback
interface. This connection is not visible on any external
interface and no data is sent to or received from the Internet.
*****

IDLE 2.6.6      ---- No Subprocess ----
>>> print("This is a test");
This is a test
>>>
```

```
Python 3.2.3 (default, Apr 11 2012, 07:15:24) [MSC v.1500 32]

helloworld.py - E:\python-programs\helloworld.py
File Edit Format Run Options Windows Help
print("Hello W
Python Shell
Check Module Alt+X
Run Module F5
Ln: 1 Col: 0
```