

# One -week Addon Certificate Course on Python Programming

**Date :** May 12-14 th 2022 and May 18-21 2022

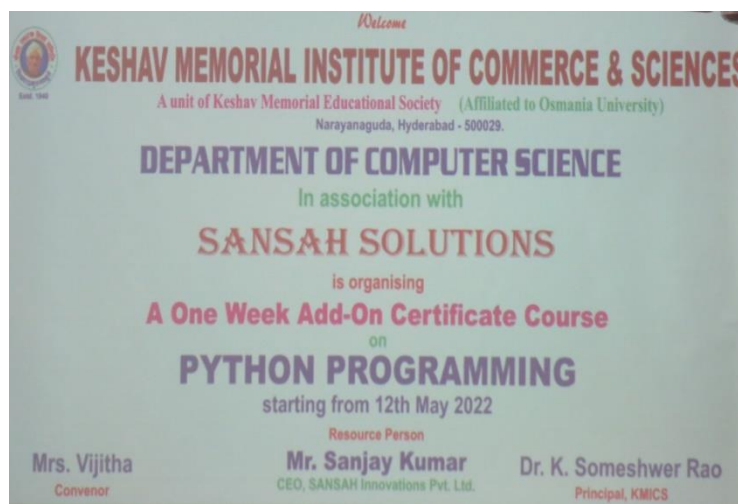
**Time:** 12.30PM to 4.30PM      **Venue:** UG Computer Lab.

Python is a general-purpose language and versatile programming language that can be used in different fields Machine Learning and AI, Web Development, Data Analytics, Game Development, IoT, Application Development, and Game Development. Etc Recognising this ,Department of Computer Science has organized a **One week Add-on Certificate Course** on “**Python Programming** “ in association with **Sansah Solutions pvt Ltd, Hyderabad** on **May 12-14 th and May 18<sup>th</sup> -21st 2022** from 12.30PM to 4 30PM.in UG Computer Lab.

The main objective of this course is to provide basic knowledge of Python and acquire programming skills in Python.

Mrs Vijitha ,Head,Department of Computer Science welcomed all the dignitaries, staff and students . Later Dr.K.SomeshwerRao, Principal, KMICS inaugurated the Course, motivated the students and explained that these kind of courses are beneficial for their upcoming placements and technical knowledge. The Resource Person was Mr .Sanjay Kumar ,CEO, Sansah Solutions Pvt Ltd. During the training course , his constant support throughout the course and helped sharing resources and figuring out students' problems with the concepts, while solving the given exercises. A total of **49** students ranging from first year students to third year students from Computer Science B.SC (MSCs, MPCs & MPC) took part in this workshop.

## Glimpses of the Course



**Certificate Course Banner**



Vijitha, Head, Department of Computer Science  
Addressing the Welcoming Dignitaries, Staff &  
Participants



Dr.K.SomesherRao , Principal, KMICS  
Addressing the Participants

### **DAY 1: 12<sup>th</sup> May 2022 # Introduction to Python Programming**

- What is Python?
- Why do we need Python?
- Applications of python (web applications, web frameworks, GUI based desktop applications etc.)
- Program structure in Python

#### **# Execution steps**

- Interactive Shell
- Executable or script files.
- User Interface or IDE

#### **# Memory management and Garbage collections**

- Object creation and deletion
- Object properties

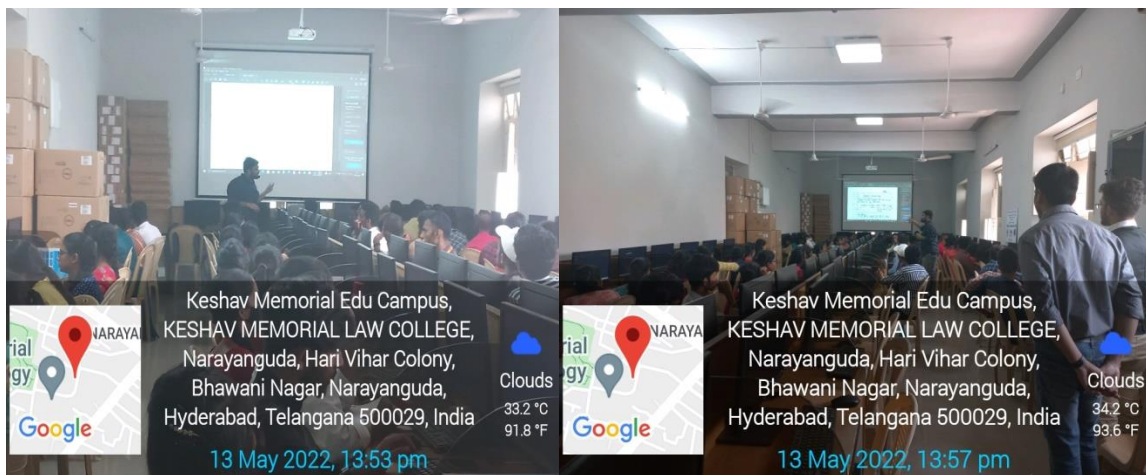




**Day 1 : Students training under resource Person Mr .Sanjay Kumar,**

**Day 2 : 13<sup>th</sup> May 2022 # Data Types and Operations**

- Variables
- Numbers
- Strings
- List
- Tuple
- Dictionary
- Other Core Types

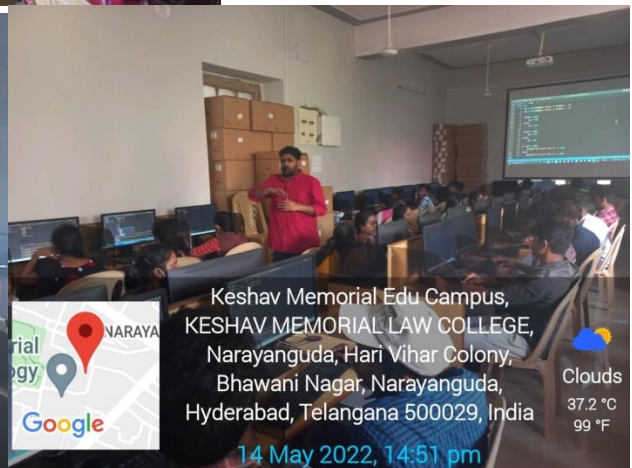
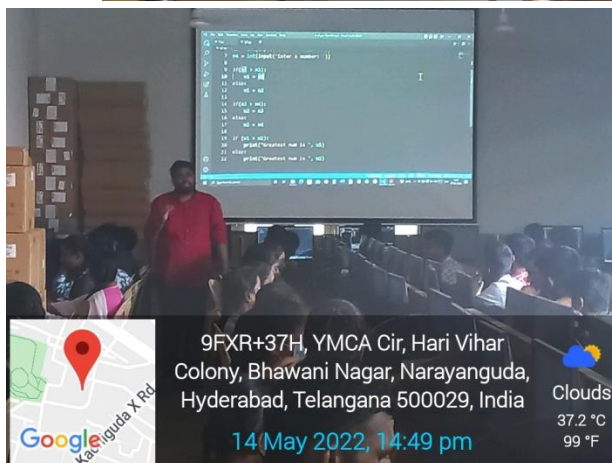


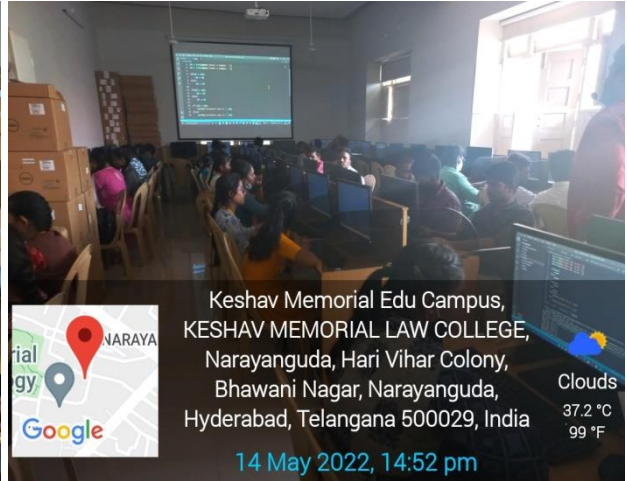




### .Day 3: 14<sup>th</sup> May 2022 # Statements and Syntax in Python

- Assignments, Expressions and prints
- If tests and Syntax Rules
- While and For Loops
- Iterations and Comprehensions



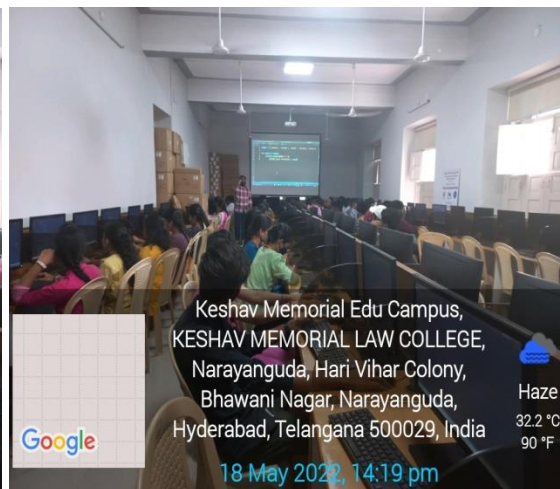
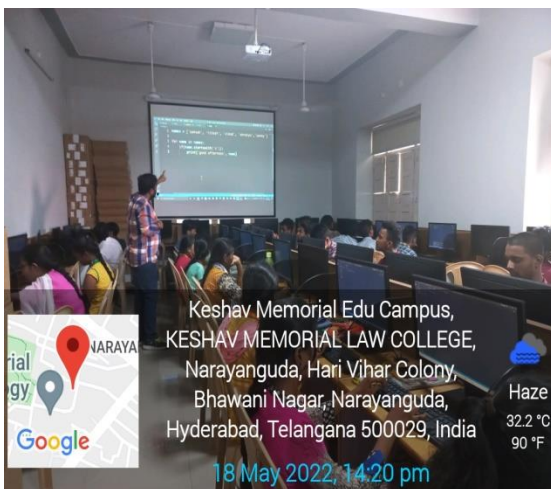


#### Day 4 :18<sup>th</sup> May 2022 # File Operations

- Opening a file
- Using Files
- Other File tools

#### # Functions in Python

- Function definition and call
- Function Scope
- Arguments
- Function Objects
- Anonymous Functions



Day 5 glimpses

#### Day 5 : 19<sup>th</sup> May 2022 #Modules and Packages

- Module Creations and Usage
- Module Search Path
- Module Vs. Script

- Package Creation and Importing



**Day 6 :20<sup>th</sup> May 2022 # Classes in Python**

- Classes and instances
- Classes method calls
- Inheritance and Compositions
- Static and Class Methods
- Bound and Unbound Methods
- Operator Overloading
- Polymorphism

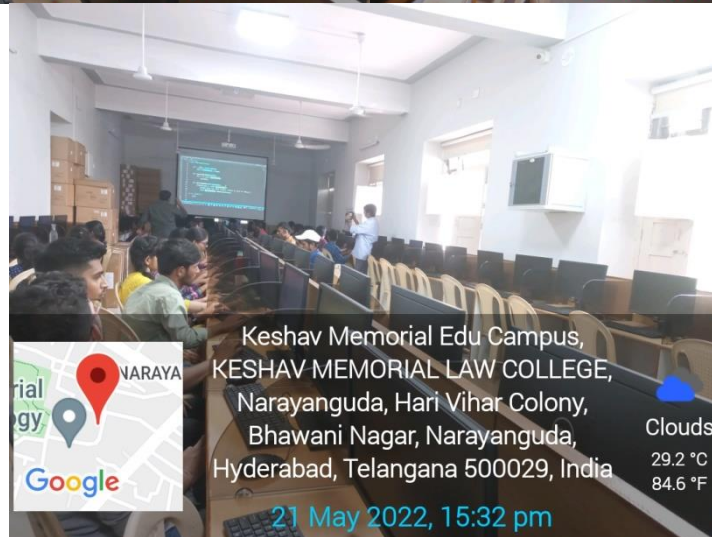
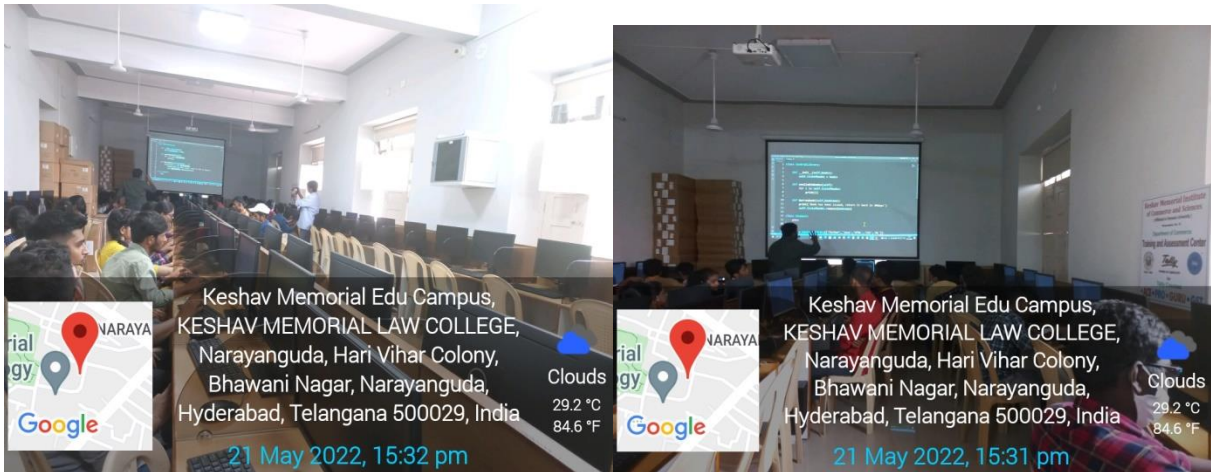




**Day 7: 21<sup>st</sup> May 2022    # Exception Handling in Python Programming**

- Default Exception Handler
- Catching Exceptions
- Raise an exception
- User defined exception

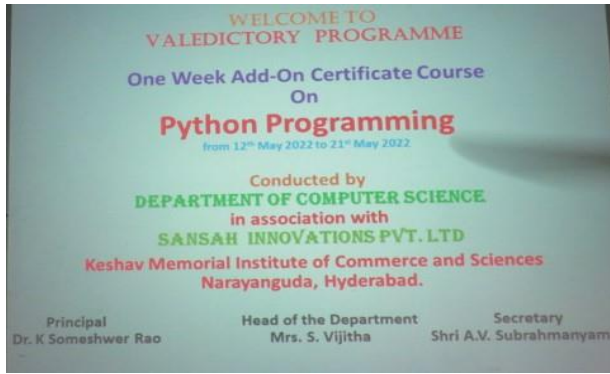
**## Mini Project: Library Management Systems**



On the last day of Course, students were taught a mini project on Library Management Systems. In this hands-on course, students gained experience on Python programming and its features. Students learnt the applications of various modules in Python.



**Valedictory Glimpses :** Programme held on 24<sup>th</sup> May 2022 ,1.00 PM in UG Seminar Hal II Floor



Valedictory Banner on 24<sup>th</sup> May



Vijitha,HOD,Department of Computer Science, Welcoming ChiefGuest, Staff and Students



Dr.K.Someshwer Rao,Principal,KMICS addressing the students



Mr.SanjayKumar,Resource Person ,KMICS addressing the Students



Dr.K.Someshwer Rao,Principal,KMICS Motivating the Students



Students during Valedictory programme







Felicitating Resource Person Mr.Sanjay Kumar by Dr.K.Someshwer Rao Garu,Principal,KMICS and Dr,J.Nageshwer Rao Garu,Director,KMICS



Proposing Vote of thanks by Mr.NarasimhaReddy, Lecturer in Computer Science



Principal Sir, Resource Person and Computer Science Department Faculty



Concluding picture with Principal Sir Principal Sir, Resource Person and Computer Science Faculty



Course Completion Certificate



## **Contents & Syllabus**

### **Day 1 # Introduction to Python Programming**

- Why do we need Python?
- Program structure in Python

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- User Interface or IDE

#### **# Memory management and Garbage collections**

- Object creation and deletion
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### **Day 2 # Data Types and Operations**

- Variables
- Numbers
- Strings
- List
- Tuple
- Dictionary
- Other Core Types

### **Day 3 # Statements and Syntax in Python**

- Assignments, Expressions and prints
- If tests and Syntax Rules
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### **Day4 # File Operations**

- Opening a file
- Using Files
- Other File tools

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- Function Scope
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