

DEPARTMENT OF MATHEMATICS

REPORT ON SKILL ENHANCED WORKSHOP

Event Name : Python Application Programming

Date : 6th and 7th December 2021

Venue: Mathematics Lab.

Participants: 1st year B.Sc(EMCs) students.

Resource Person: Dr. Shrinidhi Hiriannaiah

Number of students participated : 16

Event Co-Ordinator : Mrs.Thulasi.R.Mudakavi

Objective: The course is designed to give brief insight about Python application programming to the students to enrich their knowledge in programming. The focus of the course is to make students develop their own simple Python programs, understand some built-in commands and learn plotting graphs for different functions.

Department of Mathematics organized two days Skill Enhanced workshop on “Python Application Programming ” on 6th and 7th December 2021 for the students of 1st year B.Sc(EMCs) in Mathematics Lab from 9.30 AM and 1.30 PM . The Skill Enhanced workshop was inaugurated by Prof.Jayaram,Vice Principal under the patronage of Sri.M.R.Janakiram (Honorable Director, Gokula Education Foundation), Sri.M.R.Kodandaram (Honorable Director, Gokula Education Foundation) and Sri.Ramprasad (Chief Executive, GenScience, Gokula Education Foundation). The resource person to the workshop was Dr. Shrinidhi Hiriannaiah ,Assistant Professor , Department of Computer Science and Engineering, RIT, Bengaluru .

The program started by registration of participants of 1st year B.Sc(EMCs) at 09.00 am followed by the inauguration and then the sessions began. The students were given tea break in between the sessions.

Python is High level general purpose programming language. It is Interpreted language, Cross-platform language, Open source language and Object oriented language. There are two Python versions – Python2 and Python3.

Dr. Shrinidhi started the sessions by giving an introduction to Python, how to install the python software and numpy, sympy..backend softwares which helps to run the program.

The following are the topics covered by him in the sessions:

- Problem solving techniques
- Python programming languages, Immediate mode, Script mode
- How to run a program - Interactive interpreter prompt.
- Use of print “<text>” OR print() functions for displaying
- Script file - Open a notepad and save the file with extension .py
- Math perform, conditional execution, input, output
- What is debugging
- Syntax error, Runtime errors, Semantic errors
- Variables, Expressions and Statements
- Values and data types with examples
- Assignment statement, Print statements
- Operators and operands
- Type converter functions, str, float
- Built in format
- Python programs
- Conditions, Boolean values, Conditional execution
- Chained conditionals ,Nested conditionals
- Trigs, sympify, evalf, watch out for powers, exponentials and logarithms
- Calculus, Matrices, Matrix method
- Python operators-add, subtract, modulus, floor division, Bitwise AND....
- Decision making statements: if, else, elif, nested if.

After these sessions, there was an interactive session. During the interactive session, students inferred an opinion that they were benefitted by this orientation. They also told that this Skill Enhanced workshop was of immense help to acquire more knowledge about maths practicals. The last session was Valedictory. During the Valedictory function, Vice Principal presided over the function and the program was concluded by thanking each and every one who made this occasion a grand success.

Outcome:

Through this skill enhanced workshop the students will develop simple programs, understand the concept of expressions and loops in the program, plotting graphs for equation and solving mathematical problems.

Skill Enhanced Workshop on Python Application Programming Photos:

