



# LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)

Accredited by NAAC & NBA (CSE, IT, ECE, EEE & ME)

Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada

L.B.Reddy Nagar, Mylavaram-521230, Krishna Dist, Andhra Pradesh, India

## DEPARTMENT OF MECHANICAL ENGINEERING

### REPORT ON "PYTHON PROGRAMMING"

Event Type	: Skill Oriented training program
Date / Duration	: 18-07-2022 to 21-07-2022 & 27-07-2022 to 28-07-2022 (one week)
Name of the event	: Python Programming
Resource Person	: Mrs. Kamatham Veera Vanitha, Trainer and Developer, APSSDC, Vijayawada  Mrs. M.Ruthumma, Trainer and Developer, APSSDC, Vijayawada
Name of the Coordinator(s)	: Mr. A. Dhanunjaya Kumar, Assistant Professor Mr. K.Venkateswara Reddy, Assistant Professor
Target Audience	: B. Tech-V Semester
Total Number of students	: 64
Objective of the event	: To get Coding skills in Python.
Outcome of event	: Students acquired more knowledge on python programming and applied to core related examples.
Description / Report on Event:	The Mechanical Engineering Department conducted one week skill oriented training program on Advanced Python Programming for V Semester Students from 18-07-2022 to 21-07-2022 and 27-07-2022 to 28-07-2022 in association with APSSDC. During the training sessions, the students got the knowledge on the following topics.
	<ul style="list-style-type: none"><li>➤ Introduction to Data Analysis</li><li>➤ Data Manipulation with Numpy</li><li>➤ Data Analysis with Pandas</li><li>➤ Introduction to Data Visualization with Matplotlib</li><li>➤ Data Visualization With Seaborn</li></ul>
Feed back/ Suggestions	: Overall students are satisfied with this training program.

# Workshop Boucher

## COMMITTEE MEMBERS

### Chief Patron:

Sri. Lakireddy Jaya Prakash Reddy  
*Honorary Chairman*  
 Sri. Lakireddy Prasad Reddy  
*Chairman*  
 Sri L. Vijaya Kumar Reddy  
*Vice -Chairman*

### Patron:

Sri. G. Srinivasa Reddy  
*President*  
 Dr. K. Appa Rao  
*Principal*  
 Dr.K.Harinadha Reddy  
*Vice principal*

### Advisor:

Dr.M.Srinivasa Rao  
*Dean Academics*  
 Dr. E.V.Krishna Rao  
*Dean R&D*

### Convener:

Dr. S.Pichi Reddy  
*Professor & HOD, ME*

### Institute SPOC:

Dr. X.Vijay Bhasakar Reddy  
*Associate Professor, CSE*

### Coordinators:

Mr. A. Dhanunjay Kumar  
*Assistant Professor*  
 Mr. K. Venkateswara Reddy  
*Assistant Professor*

### Important Dates

Last date for submission of application: 16-07-2022  
 Duration of Program: 18<sup>th</sup> to 23<sup>rd</sup> July 2022.

### Resource Persons:

1. Meda Ruthumma
2. Kamatham Veera Vanitha  
*Python Trainer, APSSDC*

### Target Audience

The workshop is open to all third year B.Tech Graduate students of AICTE approved engineering colleges.

### Registration Particulars

Application in the prescribed format duly sponsored by the Head of the Institution should reach the coordinators on or before 16.07.2022.

**Note:** Brochure & registration form can also be downloaded from our college website.  
<http://www.lbrce.ac.in>

### Registration Link

All the students should register in given link  
<http://engineering.apssdc.in/register/>

### Registration Fee

For Each Student: Rs.300/-  
 ❖ Certificate provided for eligible students.

### NOTE

The participants need to pay the registration fee preferably through online in the given bank account. The receipt of payment details may be sent to the email:  
[venkateswarareddy7@gmail.com](mailto:venkateswarareddy7@gmail.com)

Account Name	LBRCE
Account Number	3172828720
Branch	Central bank of India, L.B.Reddy Nagar, Mylavaram
IFSC	CBIN0283964

## ONE WEEK WORKSHOP ON "PYTHON PROGRAMMING" (18<sup>th</sup> to 23<sup>rd</sup> July 2022)



ORGANIZED BY  
 DEPARTMENT OF MECHANICAL ENGINEERING



IN ASSOCIATION  
 WITH APSSDC



### LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING (AUTONOMOUS)

Approved by AICTE, New Delhi and Affiliated to  
 JNTUK, Kakinada, Accredited by NAAC, Accredited by  
 NBA (Tier-I), ISO 9001:2015 Certified Institution,  
 Mylavaram -521230, Krishna (Dt),  
 Andhra Pradesh, India,  
 Ph: 08659-222933. Fax: 08659-222931  
 Website: [www.lbrce.ac.in](http://www.lbrce.ac.in)

### About the Institute

The Lakireddy Bali Reddy College of Engineering (LBRCE) was established in the year 1998 by Lakireddy Bali Reddy Charitable Trust, whose architect is E. Lakireddy Bali Reddy sru. The institute is established with the sole aim of providing high quality educational opportunities in the field of science, engineering, technology and management. It is spread over 60 acres of sprawling lush green landscape spotted with orchids and grooves. It is approved by AICTE, affiliated to JNTUK, Kakinada and attained autonomous status in the year 2010. Institute has NAAC accreditation and almost five programs were accredited under NBA-Tier1. The College has also been awarded 2(F) and 12(B) status, apart from the recognition as a 'College with Potential for Excellence (CPE)' from the UGC.

LBRCE has sophisticated infrastructure with dedicated, well qualified and experienced faculty. A separate R&D cell is established in the college to focus on continuous research. It has various sponsored research projects by various funding agencies. All laboratories are equipped with state-of-the art facilities backed by advanced computer systems with latest software. Recently Institute has started the Advanced Robotic Control (ARC) centre in association with Garman Collaboration.

### About the Department

Mechanical Engineering is one of the major disciplines in the engineering profession and its principles are involved in the thermal, design and fabrication of nearly all of the physical devices and systems. Continued research and development have led to better machines and processes helping the mankind.

The Department of Mechanical Engineering has come into existence in LBRCE (Autonomous) in the year 1998. It offers undergraduate program in Mechanical Engineering with an intake of 180 and a Post-graduate program in the area of Thermal Engineering specialization. The Department has well qualified, dedicated faculty with good laboratory facilities including equipment required for

research work. The faculty is actively engaged in research activities in their areas of specialization. In R&D, we got DST and AICTE, MODRABS projects worth of Rs.1 Crore 27 Lakhs. The Department has DASSAULT Systems laboratory in collaboration with AP Skill Development Centre and has ANSYS 18.1 Licensed Software worth of Rs.28Lakhs for 300 users to carry out research works

### About the Workshop

The Python program is a scripting language that can be used for development, coding websites and applications, processing images, scientific data, and more. The program can be found in action on the Google search engine, NASA, Disney, Pinterest, and more. It was built for ease of use and speed and is less complicated than Ruby and other similar object-oriented programming languages. Because it is open-sourced, the program has enjoyed popularity among developers and programmers, and it continues to be the base program for most websites in operation on the internet today.

### Workshop Objective

The course is designed to provide Basic knowledge of Python. Python programming is intended for software engineers, system analysts, program managers and user support personnel who wish to learn the Python programming language.

At the end of the program the participants are expected to understand the Problem-solving and programming capability in python programming software.

Highlights of the program are

- ❖ Python Introduction
- ❖ Python basics
- ❖ Iterations
- ❖ Lists, List Methods
- ❖ Tuple, Tuple Methods
- ❖ Dictionaries, Dictionary Methods
- ❖ Pandas

## LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING (AUTONOMOUS) MYLAVARAM - 521 230 DEPARTMENT OF MECHANICAL ENGINEERING IN ASSOCIATION WITH APSSDC



### One Week Workshop on "Python Programming" (18<sup>th</sup> to 23<sup>rd</sup> July 2022)

#### Registration Form

1. Name: \_\_\_\_\_
2. Regd.No: \_\_\_\_\_
3. Year of Study: \_\_\_\_\_
4. Branch: \_\_\_\_\_
5. Institution: \_\_\_\_\_
6. Address for Correspondence  
\_\_\_\_\_
7. Phone no: \_\_\_\_\_
8. E-Mail: \_\_\_\_\_

#### Declaration

The above information provided is true to the best of my knowledge. I agree to abide by the rules and regulations of the workshop course.

Place: \_\_\_\_\_  
 Date: \_\_\_\_\_ Signature of Applicant

#### Sponsorship Certificate

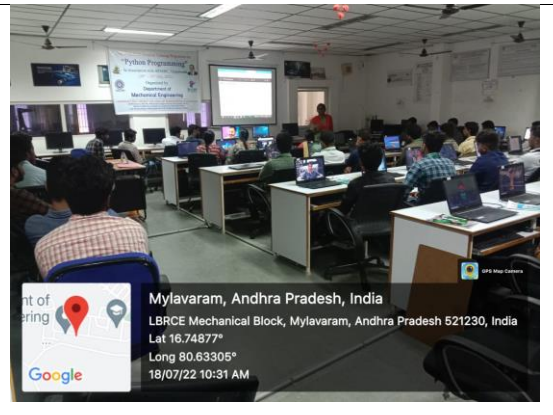
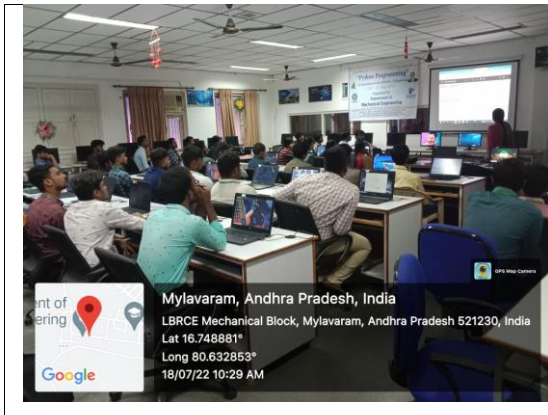
Mr./Ms. \_\_\_\_\_  
 is a student of our Institute and is hereby sponsored to participate in One Week workshop on "Python Programming".

Place: \_\_\_\_\_  
 Date: \_\_\_\_\_ Signature of Head of the Department  
 (With seal)

## Day to Day Report

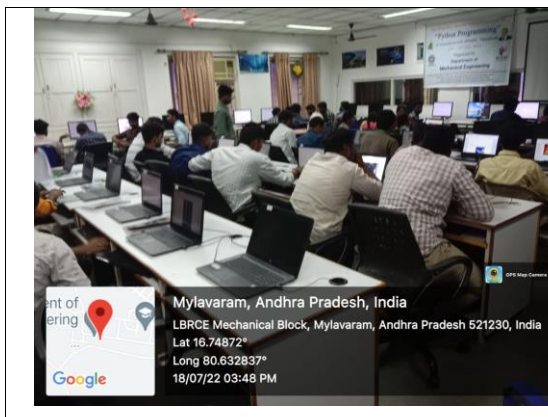
**18/07/2022: Forenoon Session (09:00 AM – 12:30 PM)**

**Topics Covered:** Python Introduction, Literate Programming, Jupyter Notebook Environment.



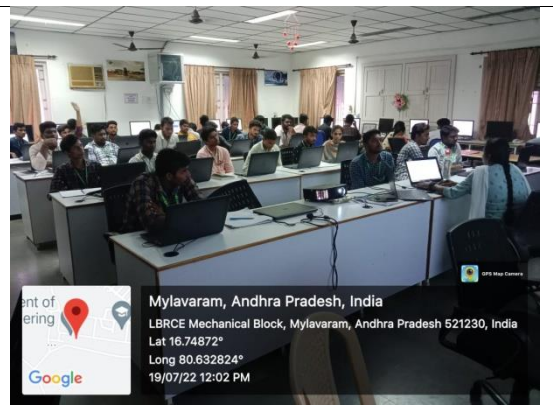
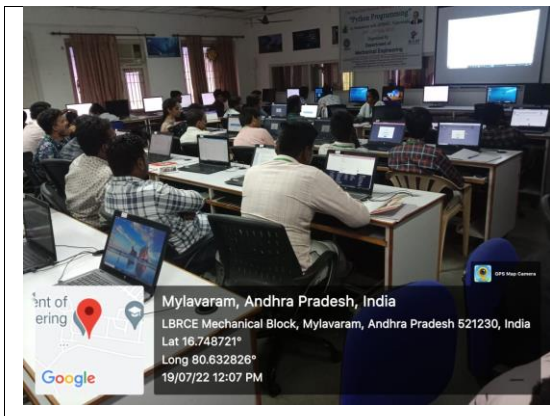
**18/07/2022: Afternoon Session (01:30 PM – 04:00 PM)**

**Topics Covered:** Markdown format for documentation, Python basics, Keywords in Python.



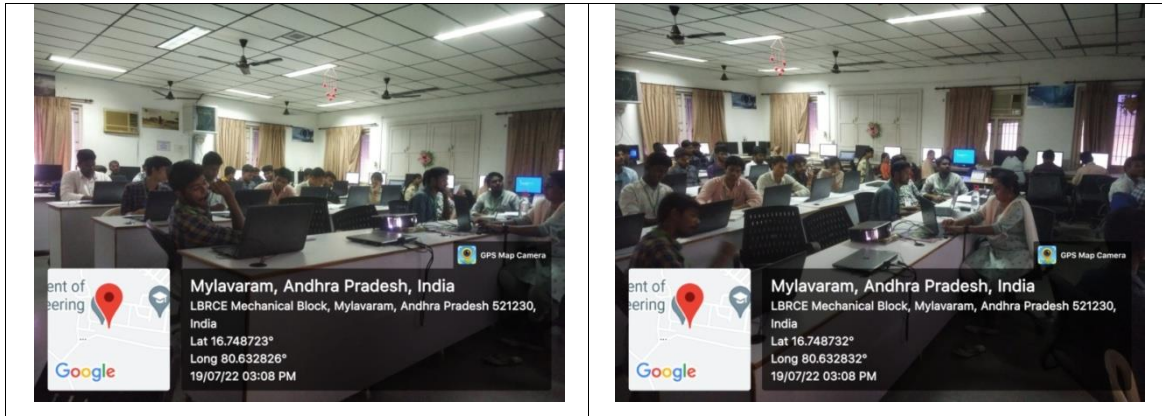
**19/07/2022: Forenoon Session (09:00 AM – 12:30 PM)**

**Topics Covered:** Operators in Python with all possible examples.



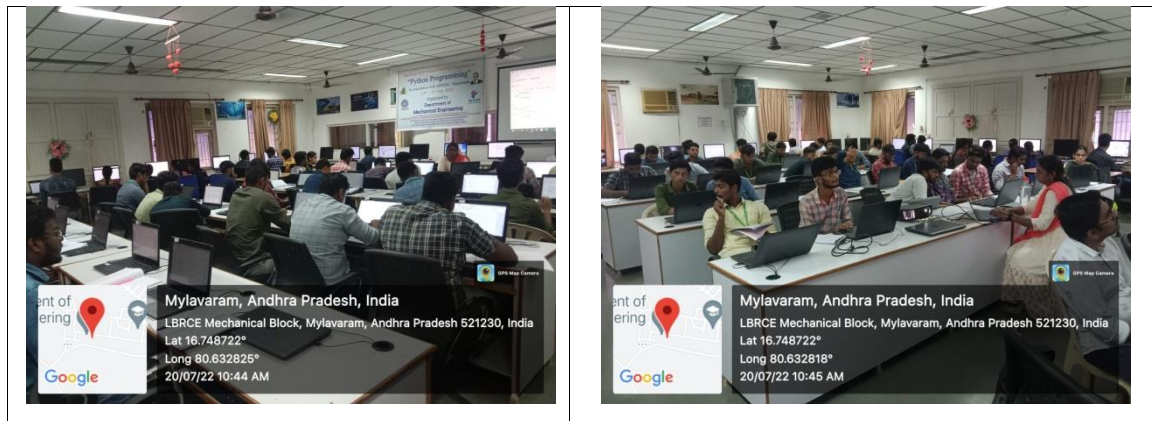
**19/07/2022: Afternoon Session (01:30 PM – 04:00 PM)**

**Topics Covered:** Conditional Statements, Iterations.



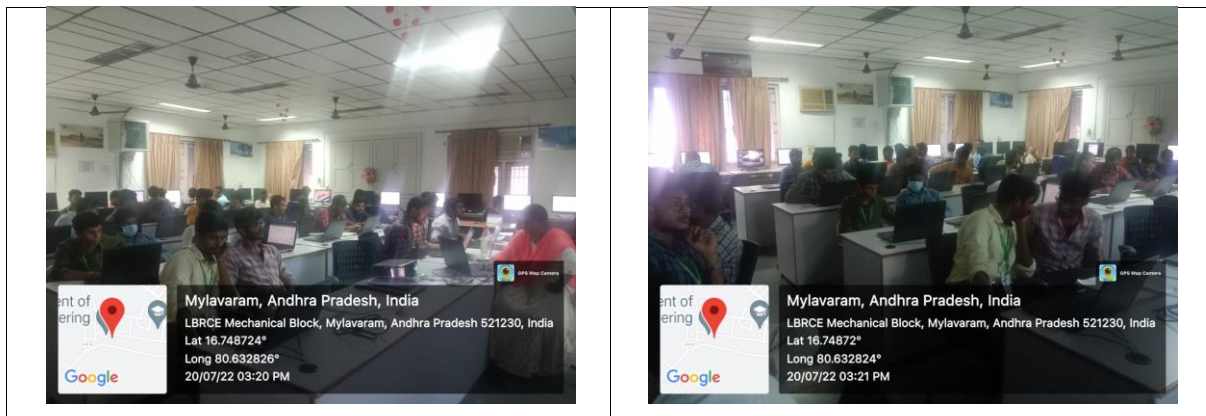
**20/07/2022: Forenoon Session (09:00 AM – 12:30 PM)**

**Topics Covered:** Jump Statements (Break, Continue with examples).



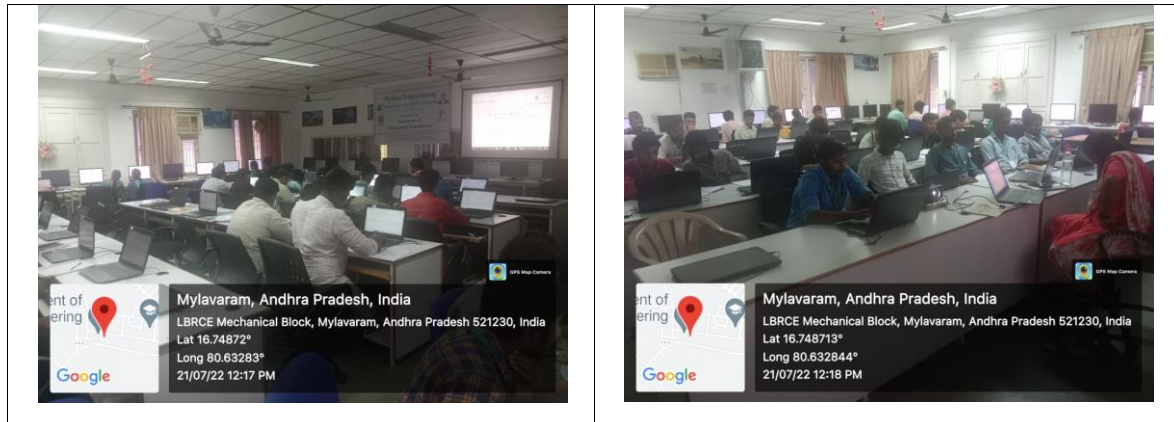
**20/07/2022: Afternoon Session (01:30 PM – 04:00 PM)**

**Topics Covered:** Functions, Arguments in Functions , Strings, String Functions.



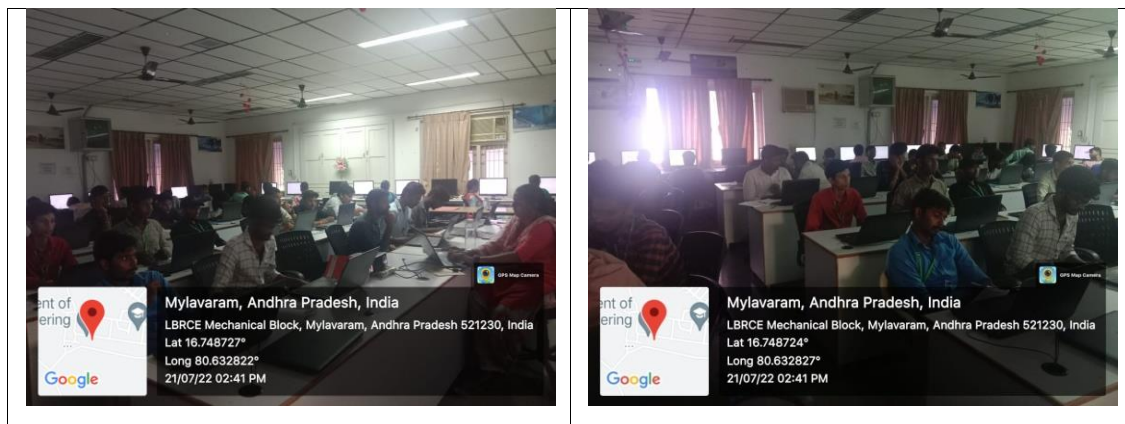
**21/07/2022: Forenoon Session (09:00 AM – 12:30 PM)**

**Topics Covered:** String Slicing, Python Data Structures, Lists, List Methods, Tuples, Tuple Methods.



**21/07/2022: Afternoon Session (01:30 PM – 04:00 PM)**

**Topics Covered:** Dictionaries, Dictionary Methods, Sets, Set Methods.



- ❖ Unfortunately the trainer grandfather expired during the workshop, and the remaining 2 days workshop will be continued on 27/07/2022 and 28/07/2022.

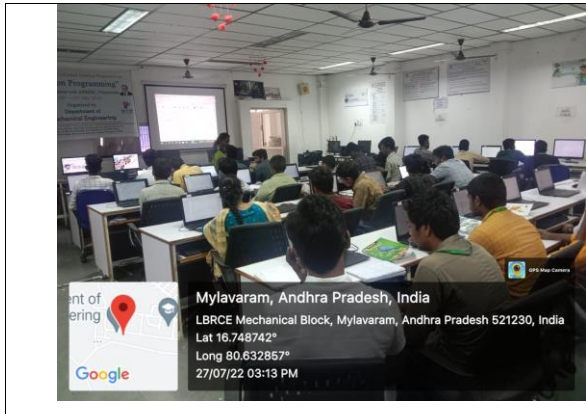
**27/07/2022: Forenoon Session (09:00 AM – 12:30 PM)**

**Topics Covered:** File Handling, List Comprehension, Dict Comprehensions.



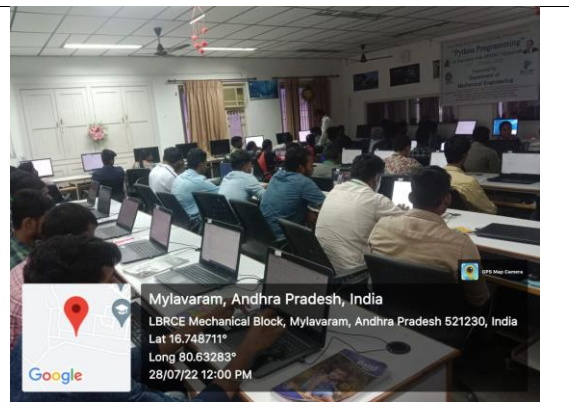
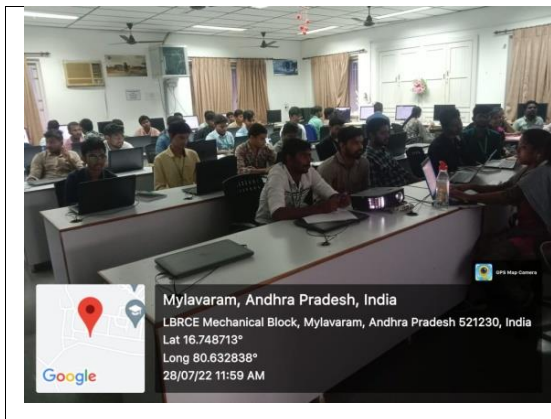
**27/07/2022: Afternoon Session (01:30 PM – 04:00 PM)**

**Topics Covered:** Packages and Modules, Regular Expression.



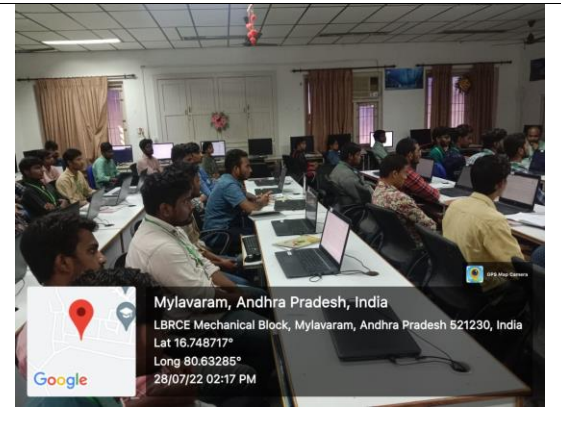
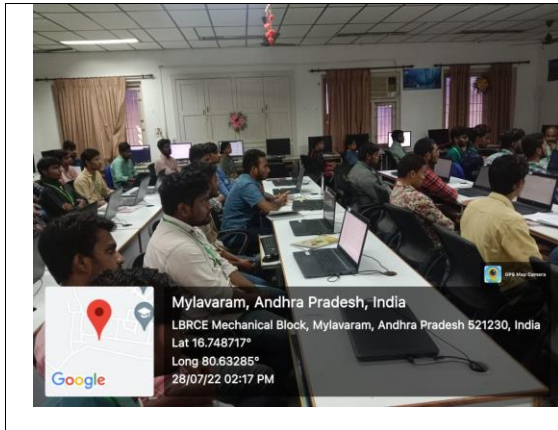
**28/07/2022: Forenoon Session (09:00 AM – 12:30 PM)**

**Topics Covered:** Creating own modules in python and Introduction to Data Science Modules Numpy module.

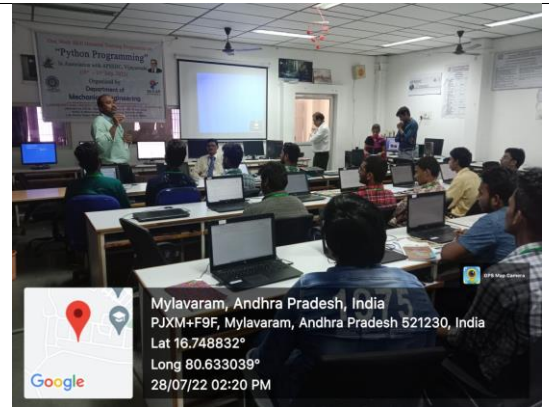
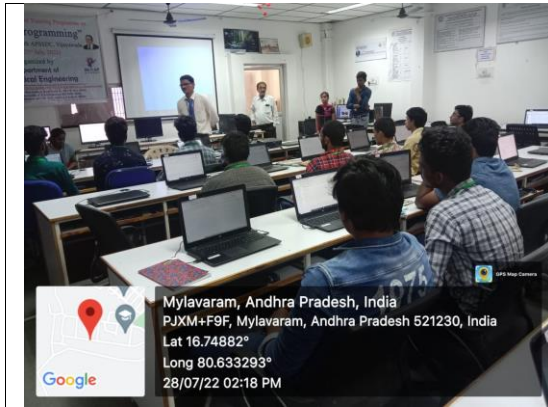


**28/07/2022: Afternoon Session (01:30 PM – 02:15 PM)**

**Topics Covered:** Data Analysis module Pandas and Data Visualization module matplotlib.



**28/07/2022: Valedictory (02:15 PM – 02:45 PM)**



**Feedback / Suggestions:**

1. To conduct advanced topics on Python Programming.
2. Conduct more workshops on Python Programming.

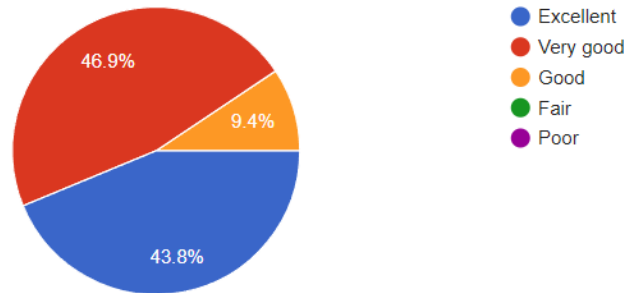
## Feedback Report:

The student participants gave their feedback on the six day offline workshop and the responses were shown in the form of graph given below.

### Feedback from the participants:

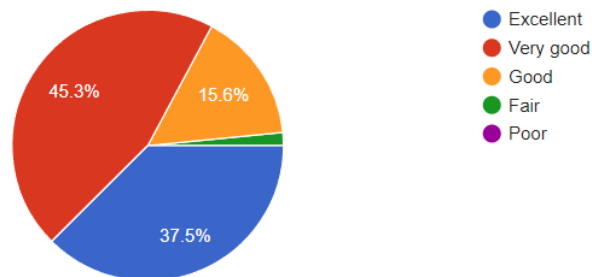
#### 1. How were the Sessions?

64 responses



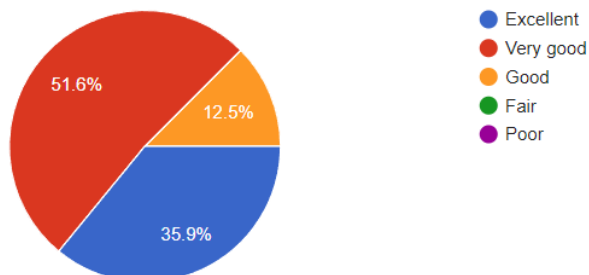
#### 2. Delivery content of the Speaker?

64 responses



#### 3. Teaching Skills of the Speaker?

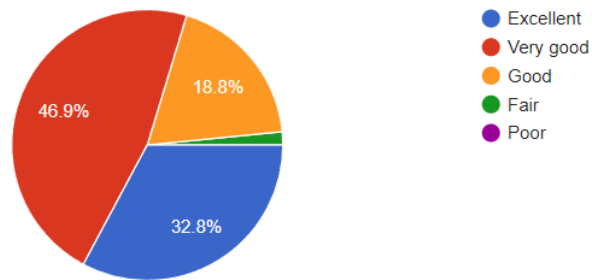
64 responses





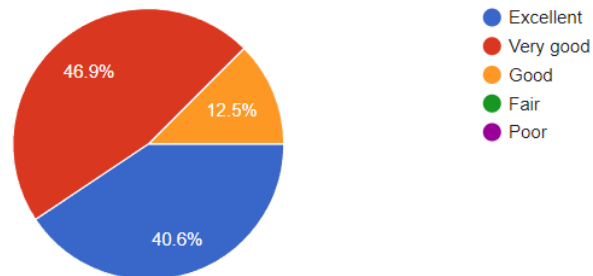
#### 4. Clarification of doubts by the Speaker?

64 responses



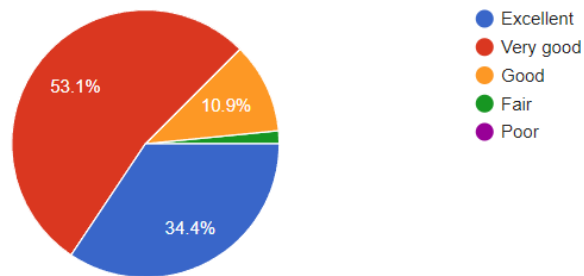
#### 5. Is the workshop useful for the Participants ?

64 responses



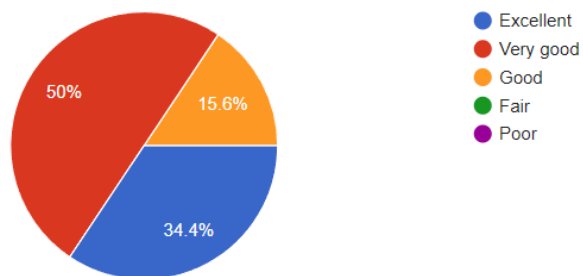
#### 6. How would you rate overall learning experience?

64 responses



#### 7. Are you likely participate in one of our events in future ?

64 responses



8. Any other comments/Suggestions

64 responses

Program is very good

Very good


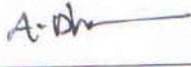

Pls do this works shops atleast five days per a month

Very useful 👍

It's an very good experience for learning Python Programming.

Good idea

We want soft copy about topics

		
Mr.K.Venkateswara Reddy	Mr.A.Dhanunjaya Kumar	Dr.S.Pichi Reddy
Coordinator	Coordinator	Convener