Dr. Vithalrao Vikhe Patil College of Engineering, Ahmednagar
Department of Information Technology

A REPORT OF FIVE DAYS STATE LEVEL CERTIFICATE COURSE ON
DATA SCIENCE USING PYTHON IN ASSOCIATION WITH ROBOSOL, MUMBAI

Five days State Level Certificate course on **Data Science using Python** organized by Department of Information Technology at Dr. Vithalrao Vikhe Patil College of Engineering, Ahmednagar in association with ROBOSOL Pvt. Ltd. Mumbai through Online mode for the students and faculty from 28th June 2021 to 2nd July 2021.

With the advancement of machine learning, AI, predictive analytics, data science is becoming a more popular career choice. The main aim of the course was to explore the power and simplicity of python & data science. For data scientists who need to incorporate statistical code into production databases or integrate data with web-based applications, Python is often the ideal choice.

The course objects were focused on to incorporate statistical code into production databases or integrate data with web-based applications; implementing algorithms that data scientists need to do often. Study of Python packages that are specifically tailored for certain functions including pandas, NumPy, and SciPy. To learn machine learning tasks that Python's scikit-learn, Matplotlib as valuable tool.
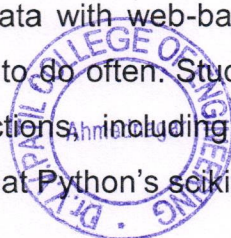
The trainer Mr. Vivek Yadav, Researcher and developer, Robosol Pvt. Ltd, Mumbai has given the mix of theory and practical knowledge of python & data analytics.

Dr. U. P. Naik, Principal has inaugurated the workshop, welcomed all participants and motivated the students with his speech and explained that these kind of workshops are beneficial for their upcoming placements and technical knowledge.
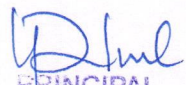
Dr. D.A. Vidhate, Head of Department, Information Technology, delivered the welcome address and enlighten with aims and objective of five days course. He explained importance of data science and python language for their carrier.

Prof.Mrs.J.P.Gaidhani Coordinator of workshop proposed the vote of thanks on behalf of the Department of Information Technology.
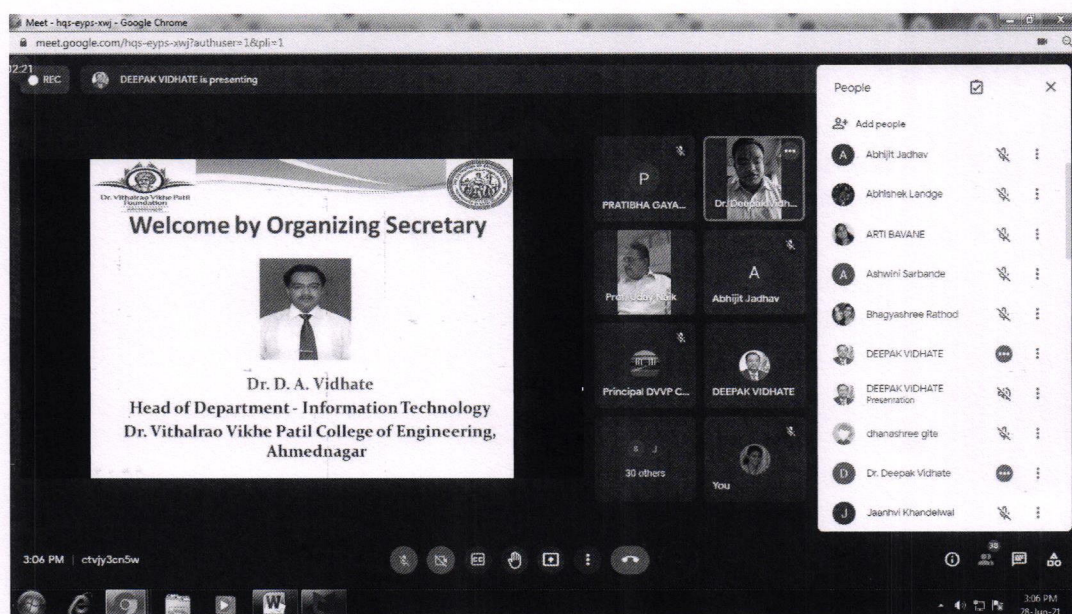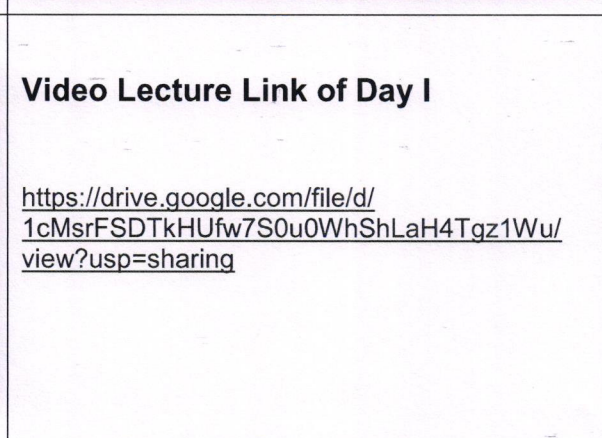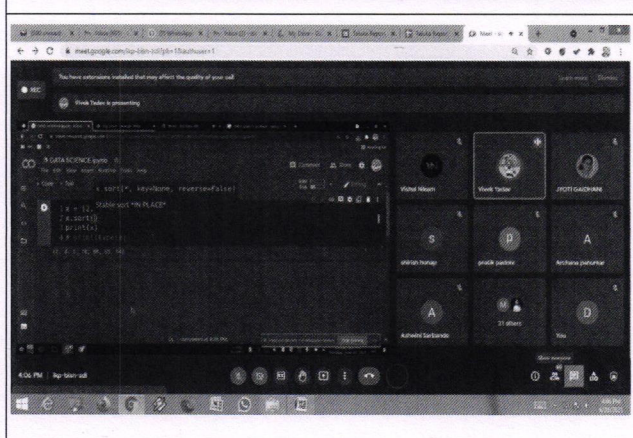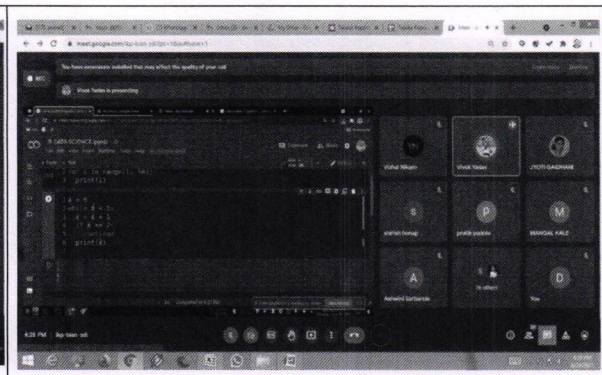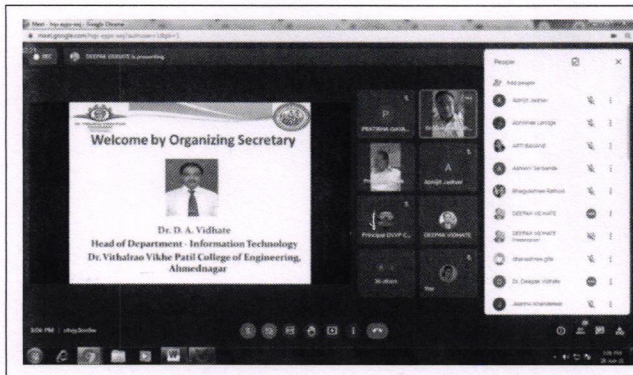

Online inauguration of state level five days workshop on data science using python
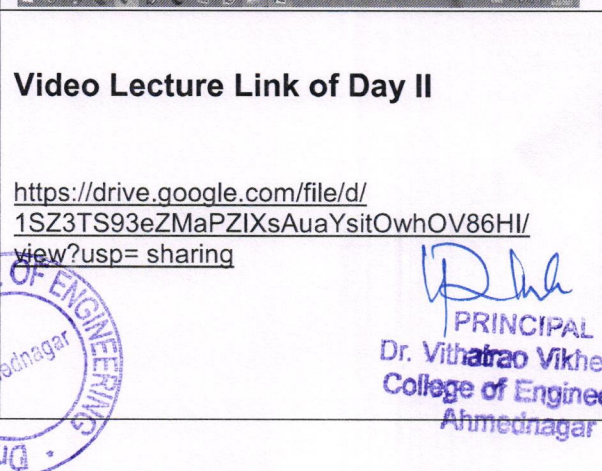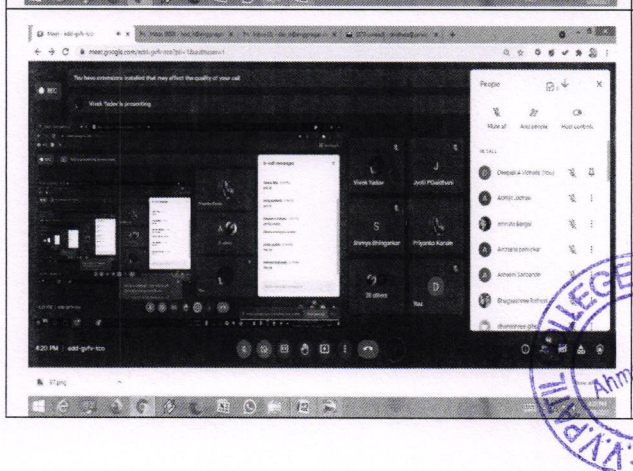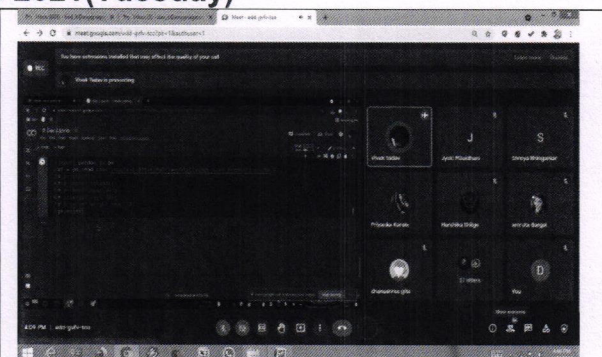
DAY I : 28th June 2021(Monday)

Video Lecture Link of Day I

https://drive.google.com/file/d/
1cMsrFSDTkHUfw7S0u0WhShLaH4Tgz1Wu/
view?usp=sharing
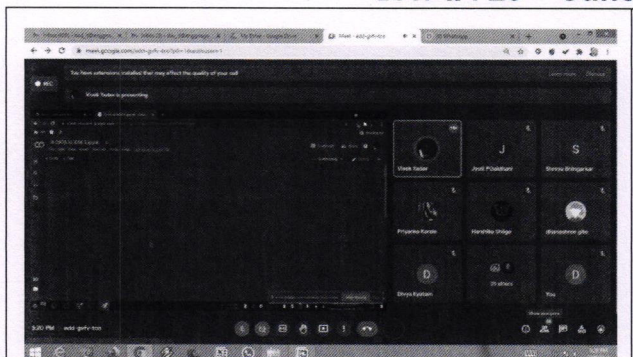
Introduction to python and students were taught that python is simple programming language compared to other programming languages, and the following topics were covered. What is python? Applications of python (web applications, web frameworks, GUI based desktop applications etc.) Data types in python with programs. Loops & conditions in python with programs. Introduction of various Python libraries such as Pandas, Numpy, Matplotlib essential for Data Science. Also covered how to do python programming on colab.research.google.com.

DAY II : 29th June 2021(Tuesday)

Video Lecture Link of Day II

https://drive.google.com/file/d/
1SZ3TS93eZMaPZIXsAuaYsitOwhOV86HI/
view?usp= sharing

PRINCIPAL
Dr. Vithalrao Vikhe Patil
College of Engineering
Ahmednagar

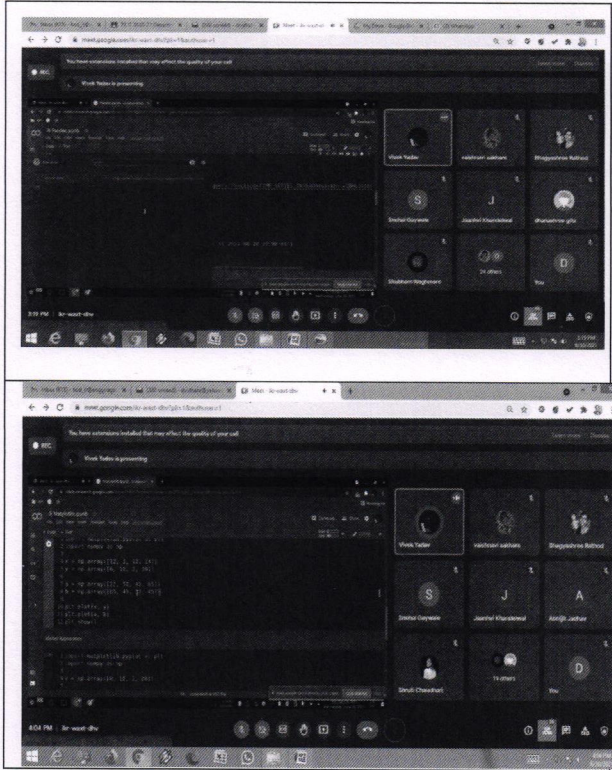Mounting drive in colab, importing math library, Map function, Filter function, playing with API, importing, CSV file, importing JSON file, importing text file, playing with CSV file, iterating line by line, calculate mean, median, std, var, sorting data

DAY III: 30ᵗʰ June 2021(Wednesday)
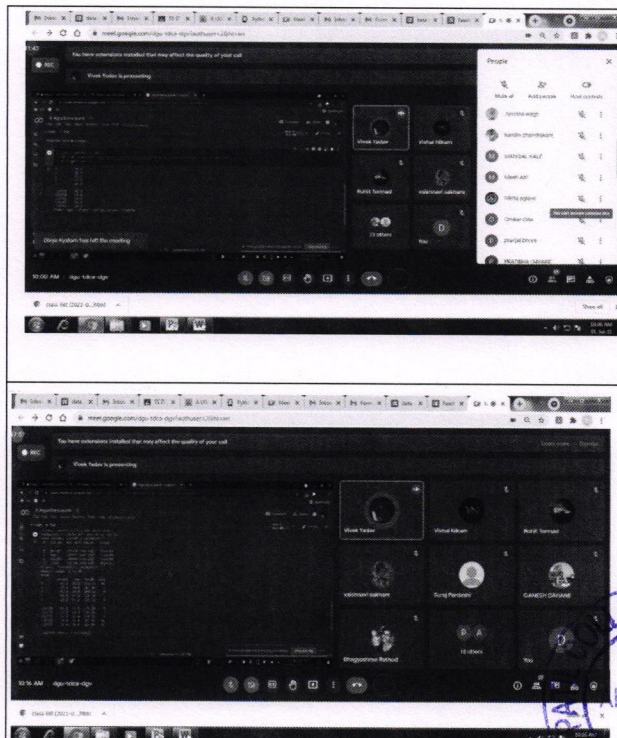
Video Lecture Link of Day III

https://drive.google.com/file/d/1vCjEcOvglbJCI81DtCSZ_PKs-3MVM3OI/view?usp=sharing

Removing specific row in column, create .exel from dictionary, how to check data type, study about Numpy, matplotlib, how to plot line graph using plot() function, marker appearance of graph, labels, grid, Platting two different graph in same window

DAY IV: 1ˢᵗ July 2021(Thursday)

Video Lecture Link of Day IV

https://drive.google.com/file/d/1cRe3YjC6n0T4AakySaivK-NZogPG1d3h/view?usp=sharing
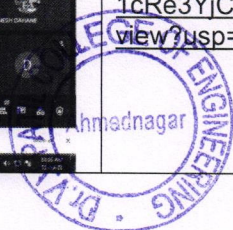
PRINCIPAL
Dr. Vithalrao Vikhe Patil
College of Engineering
Ahmednagar

How to find mean, median, mode, standard deviation. converting data into pie chart. What is Normal data distribution, what is machine learning, types of machine learning, Algorithm used in machine learning like linear regression, polynomial regression with practical implementation

Day V : 2nd July 2021 (Friday)

Video Lecture Link of Day V

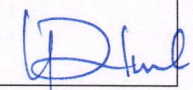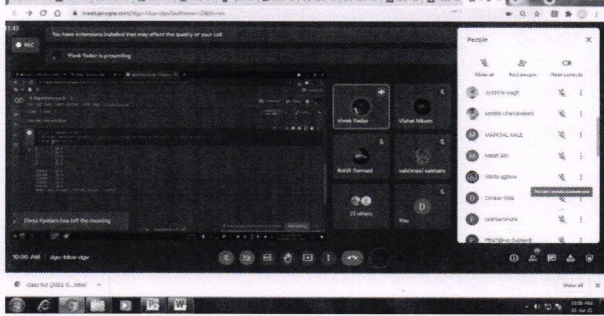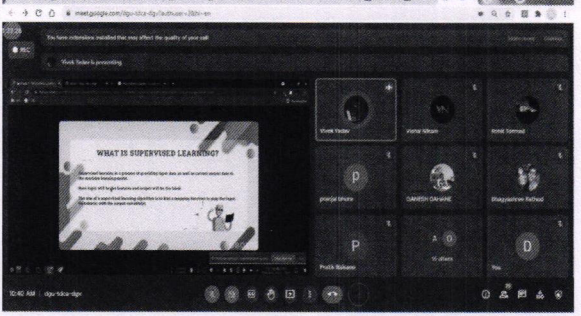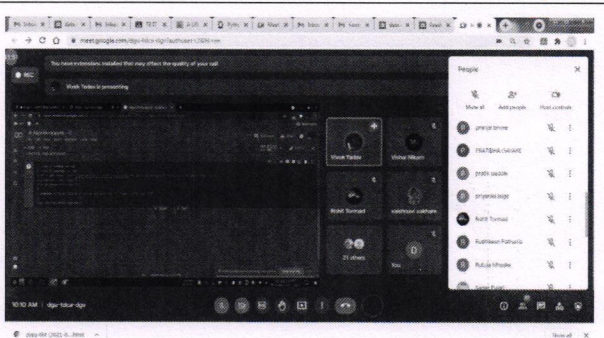https://drive.google.com/file/d/1WkpzVW6kOGYON_BMdhkNIK_AD7rdJHwo/view?usp=sharing

Machine learning algorithm decision tree, multiple regression, Artificial intelligence, Power BI tool- Power BI is a Data Visualization and Business Intelligence tool that converts data from different data sources to interactive dashboards and BI reports.

Total 52 participants were attended five days course. Students from outside institutes like GP Nagar, Badnera, Nellore College of Engineering were also enthusiastically participated. Participants have shown keen interest in learning the concepts, methodologies and gave satisfactory feedback at the end of the session. They also suggested that the duration of the session could be increased so that they may explore in the same. Certificates of participation were issued to all participants after an Online Quiz on Python programming.

The session ended with a vote of thanks and appreciation to **Mr. Vivek Yadav** for taking the time out to educate the students and faculties. The students were interacted with the speaker even after the end of the session through online mode. **Mr. Sandip Yadav.**

At the end of workshop, all participants were really feel happy knowing that they were now able to program with a new & simple programming language Python.
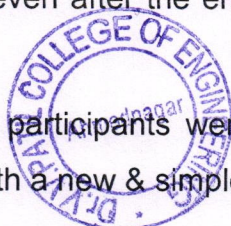
PRINCIPAL
Dr. Vithalrao Vikhe Patil
College of Engineering
Ahmednagar

SAMPLE PARTICIPATION CERTIFICATES ARE SHOWN HERE:

CERTIFICATE ID - 250651
CERTIFICATE OF PARTICIPATION
This is to certify that Ms. PRIYANKA LALGE from Dr. Vithalrao Vikhe Patil College of Engineering has participated in Five Days State Level Certificate Course on "Data Science using Python" organized by Department of Information Technology, Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar in association with ROBOSOL - for a cause, Mumbai form 28th June to 2nd July 2021. We appreciate your active participation in the course.

Prof. Mrs. J. P. Gaidhani — Coordinator
Dr. D. A. Vidhate — HOD IT
Principal — COEA
Chairman (Robosol)

CERTIFICATE ID - 250696
CERTIFICATE OF PARTICIPATION
This is to certify that Mrs. RUPA SAHITHI PANATHULA from NARAYANA ENGINEERING COLLEGE, NELLORE has participated in Five Days State Level Certificate Course on "Data Science using Python" organized by Department of Information Technology, Dr. Vithalrao Vikhe Patil College of Engineering, Ahmednagar in association with ROBOSOL - for a cause, Mumbai form 28th June to 2nd July 2021. We appreciate your active participation in the course.

Prof. Mrs. J. P. Gaidhani — Coordinator
Dr. D. A. Vidhate — HOD IT
Principal — COEA
Chairman (Robosol)

CERTIFICATE ID - 250670
CERTIFICATE OF PARTICIPATION
This is to certify that Ms. SHREYA KIRAN BHINGARKAR from Government polytechnic, Ahmednagar has participated in Five Days State Level Certificate Course on "Data Science using Python" organized by Department of Information Technology, Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar in association with ROBOSOL - for a cause, Mumbai form 28th July to 2nd July 2021. We appreciate your active participation in the course.

Prof. Mrs. J. P. Gaidhani — Coordinator
Dr. D. A. Vidhate — HOD IT
Principal — COEA
Chairman (Robosol)

CERTIFICATE ID - 250691
CERTIFICATE OF PARTICIPATION
This is to certify that Ms. ARCHANA BUDDHAM PAHURKAR from PRMIT&R Badnera has participated in Five Days State Level Certificate Course on "Data Science using Python" organized by Department of Information Technology, Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar in association with ROBOSOL - for a cause, Mumbai form 28th June to 2nd July 2021. We appreciate your active participation in the course.

Prof. Mrs. J. P. Gaidhani — Coordinator
Dr. D. A. Vidhate — HOD IT
Principal — COEA
Chairman (Robosol)

CERTIFICATE of EXCELLENCE:

CERTIFICATE ID - 250697
CERTIFICATE OF EXCELLENCE
This is to certify that Mrs. J. P. Gaidhani appointed as Chief Faculty Coordinator in Five Days State Level Certificate Course on "Data Science using Python" organized by Department of Information Technology, Dr. Vithalrao Vikhe Patil College of Engineering, Ahmednagar in association with ROBOSOL - for a cause, Mumbai form 28th June to 2nd July 2021. We appreciate your effort for this course.

Prof. Mrs. J. P. Gaidhani — Coordinator
Dr. D. A. Vidhate — HOD IT
Principal — COEA
Chairman (Robosol)

CERTIFICATE OF APPRECIATION
ROBOSOL - FOR A CAUSE, MUMBAI
Thanks and Appreciates
Dr. D. A. Vidhate
HOD Department of Information Technology,
Dr. Vithalrao Vikhe Patil College of Engineering, Ahmednagar
For Organizing 5 day Online Workshop
on **"DATA SCIENCE using PYTHON"** from 28th June- 2nd July 2021

R & D(Robosol)
Chairman (Robosol)

* * * * * * * *

PRINCIPAL
Dr. Vithalrao Vikhe Patil
College of Engineering
Ahmednagar