

T D X

DV Lab

2-A214



Vel Tech
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
(Deemed to be University) by UGC Act, 1956



**School of Computing
Department of Computer Science & Engineering
(Artificial Intelligence and Machine Learning)**

ACADEMIC YEAR 2025-26 (SUMMER SEMESTER)

LAB RECORD NOTEBOOK

10212CA214 - DATA VISUALIZATION

NAME: M.R. Tejeshwar Reddy

VTU.NO: 24923

REG.NO: 23UECL0037

BRANCH: CSE (AI/ML)

YEAR/SEM: 3rd / 5th

SLOT: S2 L1

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Department of Computer Science & Engineering
(Artificial Intelligence and Machine Learning)

ACADEMIC YEAR 2025-26 (SUMMER SEMESTER)

BONAFIDE CERTIFICATE

NAME : M.R.Tejeswari Reddy BRANCH : CSE(AI)M
TU NO. : 24923 REG.NO. : 23UETC0037
YEAR/SEM : 3rd / 5th SLOT NO. : 5101L

Certified that this is a bonafide record of work done by above student in the "**10212CA214 - DATA VISUALIZATION LABORATORY**" during the year 2025-2026 (Summer Semester).

R.T. Tejeshwar Reddy
SIGNATURE OF LAB HANDLING FACULTY

SIGNATURE OF HOD

Submitted for the Semester Practical Examination held on **03.11.25** at
Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology.

INTERNAL EXAMINER

EXTERNAL EXAMINER



DV Lab

1021 CA214



Name : M.R.Tejeshwar reddy
AI/m 3rd year
STD : SEC : ROLL NO : 24923

INDEX

Date	Title	Page No.	Marks	Faculty Signature
21/07/25	Exploration of Data Visualization Tools like Tableau, Python libraries, D3.js	1-5	17	21/7
28/07/25	To visualize and perform Univariate analysis using continuous and categorical data	6-9	16	28/7
04/08/25	To visualize and perform Bivariate analysis using continuous and categorical data	10-12	15	4/8
11/08/25	To visualize and perform Multivariate analysis using Multiple variables involving Multiple measures	13-14	17	4/8
18/08/25	To design and perform visualization for Trees	15-18	17	18/8
25/08/25	To design and perform visualization for Graphs and Networks	19-21	16	25/8
08/09/25	To generate insight using Text Network Analysis and Visualization	22-29	18	8/9
15/09/25	To analyze and visualize Spatial and Geospatial data	30-32	20	15/9
29/09/25	To analyze and visualize Time Oriented Data	33-36	18	29/9
13/10/25	Use Case: Earth - Quake and Geospatial data	36-41	18	13/10
27/10/25	Use Case: Performance of different company departments over year	42-47	19	27/10

Total Marks: 192/220

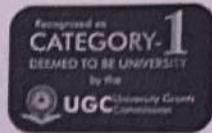
Signature of Faculty

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ACADEMIC YEAR 2025-26 (SUMMER SEMESTER)

LAB RECORD NOTEBOOK

10212CA214 - DATA VISUALIZATION

NAME: R, Navadeep

VTU.NO: 25011

REG.NO: 230EC10050

BRANCH: CSE(AIML)

YEAR/SEM: 3rd year - 1st sem

SLOT: S₁₂ L₁



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ACADEMIC YEAR 2025-26 (SUMMER SEMESTER)

BONAFIDE CERTIFICATE

NAME : - R. Navadeep

BRANCH : CSE(AIML)

VTU NO. : 25011

REG.NO. : 23UECL0050

YEAR/SEM : 3rd yr - 1st sem

SLOT NO. : S12 L1

Certified that this is a bonafide record of work done by above student in the "**10212CA214 - DATA VISUALIZATION LABORATORY**" during the year 2025-2026 (Summer Semester).

R.T. T. *[Signature]* 29/10/25

SIGNATURE OF LAB HANDLING FACULTY

[Signature] 2a

SIGNATURE OF HOD

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INTERNAL EXAMINER

EXTERNAL EXAMINER

output

1. pandas is a powerfull data manipulation and analysis library.
2. pd.read_csv reads the csv file.
3. df.head() shows the first 5 rows of the dataset.
4. len(discoloumns) returns the total no.of Coloumn.
5. sort_values sorts the data frame.
6. df.unique shows the no.of unique values in ed Coloumn.
7. df.shape gives a tuple (rows, Coloumn) represent.

